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Annual Report on the Public Health in Sind for the year 1937.

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ANNUAL REPORT ON PUBLIC HEALTH, 1937.

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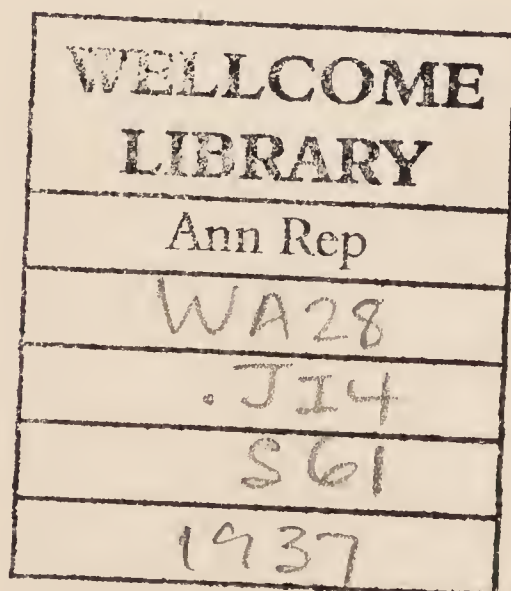
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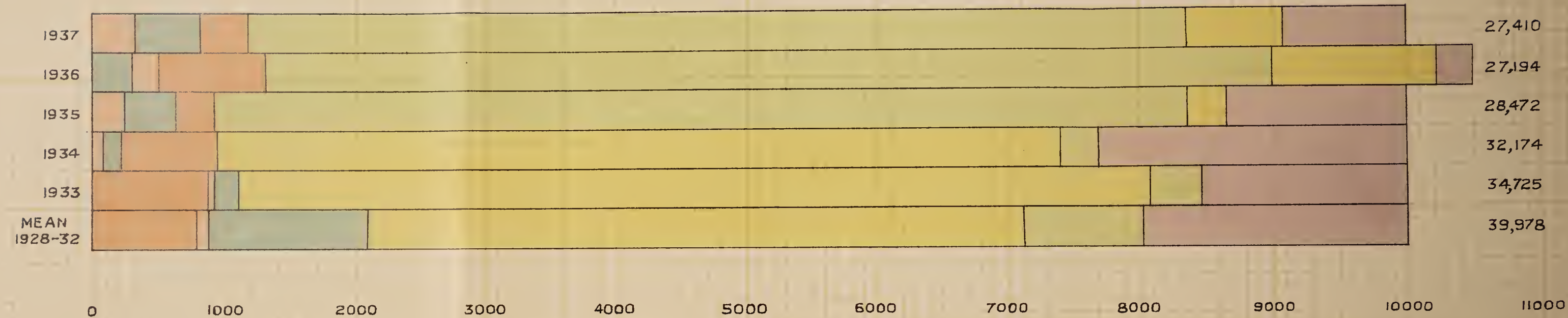


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CHART I.
DEATHS IN 1937 AND PREVIOUS YEARS.



THE ACTUAL DEATHS FROM FEVERS ARE MENTIONED IN FIGURES.

- INFLUENZA & MEASLES ETC.
- PLAGUE, CHOLERA & SMALL-POX.
- DYSENTERY & DIARRHOEA.
- OTHER CAUSES & INJURIES.
- RESPIRATORY DISEASES.
- FEVERS.

ANNUAL REPORT ON PUBLIC HEALTH FOR 1937.

CHAPTER I.

METEOROLOGY : ECONOMIC CONDITIONS, *i.e.*, PRICES OF FOOD GRAINS, ETC.,

1. *Rainfall*.—The total rainfall during the year was 7.67 inches and was above the average by 23 per cent. The monsoon was active during the period from June to September and caused fairly widespread rainfall in the province. Excepting this period, the rest of the year was dry.

2. *Economic conditions*.—The working of the Lloyd Barrage and Canal Systems on both the Left and Right Banks of the river was satisfactory. As much as ten lacs of acres on both the banks were brought under cotton cultivation. Crop condition in the Barrage area was better than that in the non-Barrage area. Owing to timely and adequate rainfall in the Desert Sub-division, sufficient area was brought under cultivation and the crops were good, and fodder adequate. Due to insufficient rainfall, the crops in the non-Barrage area and the Barani tracts of the Sehwan and Dadu Sub-divisions did not flourish. There were no extensive floods during the year.

A great fluctuation in the prices of agricultural commodities was experienced. There was fall in prices of cotton and wheat. Jowar and bajri commanded good prices throughout the year.

CHAPTER II.

Vital Statistics (including Population, and Emigration and Immigration).

The Province of Sind is made up of 8 Revenue Collectorates (including Karachi City). There were 61 Rural Circles (Talukas and Mahals)—26 Town Circles and 3 Cantonments. These divisions are shown in Appendix III to this report. The figures of Drigh Road Cantonment have been shown separately from this year.

1. *Population*.—The birth and death ratios are calculated on the population as recorded at the census of 1931. According to this census the population of the Province is 38,76,388 and is distributed as follows :—

Rural Circles 31,89,531,

Town Circles 6,74,087, and

Cantonments 12,770.

This population is inclusive of the figures for Europeans and Anglo-Indians. Separate information by localities for these communities is not available. The difference in the figures of population for Rural, Urban and Cantonment Circles as compared with the figures of the previous year is due to all the urban areas being shown separately as per instructions issued by the Public Health Commissioner.

Estimated Population.—In accordance with Government of India's letter, Department of Education, Health and Lands, No. F.-96-43/32-H., dated the 15th August 1932, the estimated population for the year 1937 for the Province by Collectorates and the birth and death rates calculated thereon are shown in the following table.

Name of Collectarate.	Census population 1921.	Census population 1931.	Estimated population 1937 (mid year).	Birth rate based on population of 1931.	Birth rate based on estimated population 1937 (mid year).	Death rate for 1937 on census population of 1931.	Death rate for 1937 on estimated population of 1937 (mid year).
1	2	3	4	5	6	7	8
Karachi ...	...	5,79,432	...	30.88	...	16.11	...
Dadu ...	...	3,34,282	...	17.35	...	9.57	...
Larkana ...	...	4,52,141	...	23.66	...	11.55	...
Upper Sind Frontier ...	...	2,60,326	...	14.92	...	8.81	...
Hyderabad ...	5,73,450	6,61,776	7,17,718	15.05	12.48	11.62	10.72
Nawabshah ...	41,8,660	4,96,612	5,45,980	15.01	13.47	9.74	8.85
Thar Parkar ...	3,96,331	4,68,040	5,07,123	15.48	12.32	12.52	11.55
Sukkur ...	5,10,292	6,23,779	6,95,656	23.17	20.78	13.50	12.12
Sind Total ...	32,79,377	38,76,388	4,254,494	19.96	18.19	12.09	11.02

The estimated population for the first four Collectorates, *viz.*, Karachi, Dadu, Larkana and Upper Sind Frontier and the birth and death rates based on the estimated population could not be calculated on account of the territorial changes that took place in these Collectorates in 1931.

The birth and death rates on the estimated population for the year 1937 were 15.84 and 10.77, respectively.

2. *Changes in Area.*—During the year under report, there have been no changes in the area.

EUROPEAN AND ANGLO-INDIAN VITAL STATISTICS.

3. *Europeans.*—The European population according to the census of 1931 is 6,576. In 1937 the number of births recorded was 44 (24 males and 20 females) against 37 (23 males and 14 females) in the previous year, giving a ratio of 6.69 per mille of population as against 5.62 in 1936. There were 13 deaths as compared with 10 in the preceding year, corresponding the death-rates were 1.97 and 1.52, respectively, for 1937 and 1936.

Anglo-Indians.—The population according to the census of 1931 is 1,930. The number of births registered was 30 as compared with 24 in 1936. The birth rates in 1937 and 1936 were 15.54 and 12.44, respectively. The total deaths were 17 or a ratio of 8.81 per mille of population as compared with 15 or 7.77 in the previous year.

Deaths by Ages.—The age distribution of Europeans and Anglo-Indians is shown in the following table :—

Age Periods.			DEATHS.	
			Europeans.	Anglo-Indian.
Under 1 year	...	...	...	2
1-5 years	...	...	...	4
5-10 "	...	...	1	...
10-15 "	...	...	...	...
15-20 "	...	...	...	1
20-30 "	...	...	2	2
30-40 "	...	...	1	1
40-50 "	...	...	3	2
50-60 "	...	...	2	2
60 and over	...	...	4	3
Total ...			13	17

The causes of deaths among Europeans and Anglo-Indians are shown in the following table :—

	Year.	Cholera.	Small-pox.	Fevers.	Dysentery and Diarrhoea	Respiratory diseases.	Injuries	All other causes.	Total
Europeans ...	1937	...	...	...	...	1	3	9	13
	1936	...	...	2	...	...	...	8	10
Anglo-Indians	1937	...	...	1	3	5	3	5	17
	1936	...	...	1	1	2	...	11	15

VITAL STATISTICS OF INDIANS.

4. *Births*.—The total births registered during 1937 numbered 77,389, being 2,147 less than the figure of 1936; but however it showed an increase over the 3 previous decennial means, *viz.*, 1901-10, 66,578; 1911-20, 71,306; and 1921-30, 73,693.

The number of births recorded in the previous years and the corresponding birth-rates were as follows :—

Years.		Number of births	Birth-rate
1901-10 (Mean)	...	66,578	20.77
1911-20	..	71,306	20.33
1921-30	..	73,693	22.57
1931	...	88,261	22.77
1932	...	77,976	20.11
1933	...	77,789	20.07
1934	...	75,729	19.53
1935	...	78,843	20.33
1936	...	79,536	20.52
1937	...	77,389	19.96

5. *Provincial birth-rate compared with birth-rates of other Provinces*.—The birth-rate for the year for the Province was 19.96 as against 20.52 in the preceding year. Except Madras, Bengal, and Assam, where slightly increased birth-rates were recorded, the rest of the provinces registered a decline in the recorded birth-rates as compared with the previous year. Comparative birth-rates for Provinces in India for 1937 and 1936 are shown in the following table :—

Province.		1936.	1937.
Madras	...	37.76	38.72
Bengal	...	33.53	34.20
Assam	...	30.24	31.31
Bihar	...	35.34	34.31
Orissa	...	36.63	34.75
United Provinces	...	38.99	35.92
Punjab	...	46.85	46.49
Central Provinces	...	42.50	40.65
Bombay	...	41.40	40.58
North West Frontier		32.64	30.74
Sind	...	20.52	19.96

The birth-rate in the Province of Sind was low as compared with the birth-rates in other Provinces as was the case during the previous year.

6. *Birth-rates in Collectorates.*—Of the 8 districts in the Province, the highest birth-rate was recorded in the Karachi district (30.88) and the lowest in Upper Sind Frontier district (14.92). One district returned a birth-rate of more than 30 per mille of population, and two between 20 and 30, and the remaining five under 20. Details of births and birth-rates in Collectorates are shown in Annual Form No. I.

7. *Birth-rates in Rural Areas.*—The birth-rate for the rural areas of the province during the year was 15.81 as compared with 16.38 in the previous year. There was a decrease of 2,436 births. Of the 61 talukas in the Province 17 returned rates over 20 per mille of population, 18 returned between 15 and 20; 16 between 10 and 15, and the remaining 10 under 10 per mille of population. The rates varied from 29.49 per mille in Mirokhan taluka (Larkana District) and 28.23 in Shahdadtal taluka (Larkana District) to as low a figure as 6.61 in Keti Bander Mahal (Karachi District).

8. *Birth-rate in Urban Areas.*—The number of births recorded in urban areas showed an increase of 289 over the figures of the previous year. The birth-rate of the urban areas was 39.26 as compared with 40.99 recorded in the previous year. This marked difference in the rates is due to the fact that from the year 1937 all towns irrespective of their population have been shown separately. This necessitated change in the figures of population of rural and urban areas which in turn affected the corresponding rates. This change has been brought about in consonance with the instructions of the Public Health Commissioner with the Government of India.

9. *Births in Karachi City.*—The births recorded in Karachi City were 13,882 showing a decrease of 55 from the recorded births of 1936. The birth-rate during the year was 56.02 as compared with 56.24 in the previous year.

10. *Births in Cantonments.*—The following birth-rates were recorded in the Cantonments :—Karachi 58.67, Drigh Road 11.00, and Hyderabad 12.14.

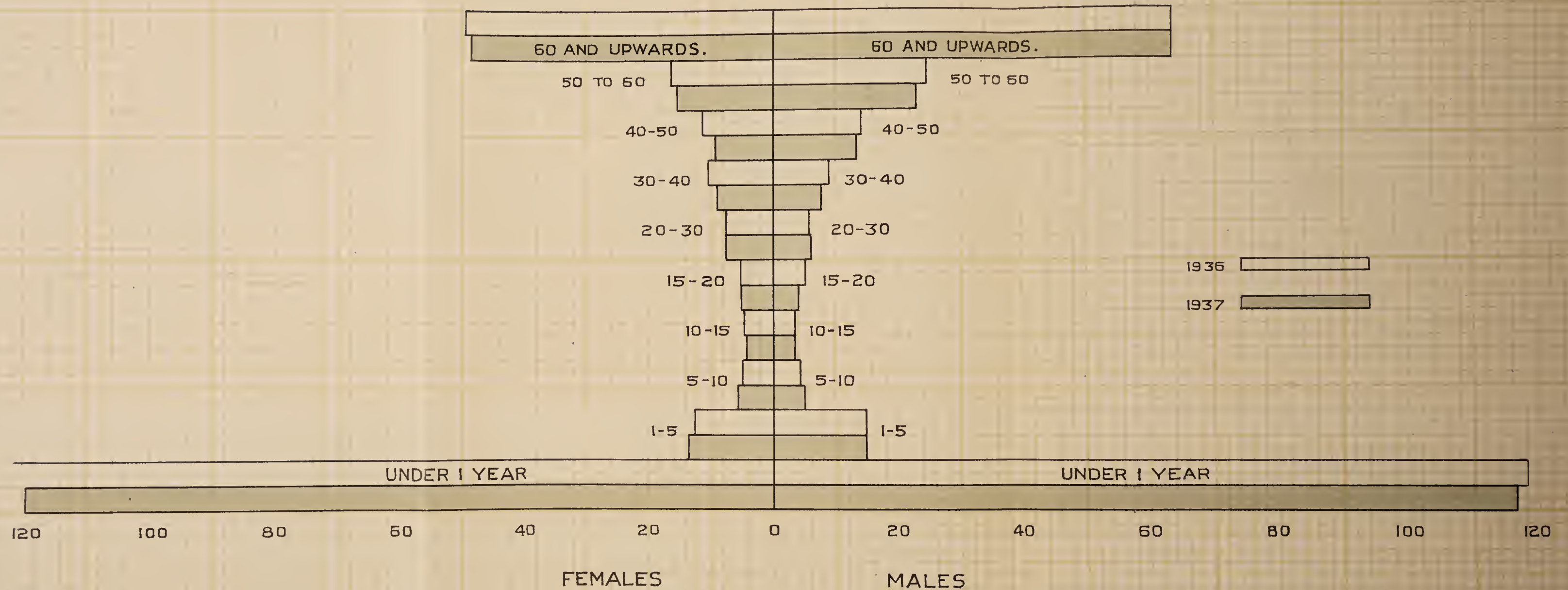
11. *Births according to sex.*—Out of 77,389 births, 43,098 were males and 34,291 females, the ratio of male to female births being 125.68 to 100 as compared with 124.92 to 100 in the previous year. The excess in male births recorded in Sind is usual.

12. *Still-births.*—During the year 1,019 still births were registered, i.e., 1.32 for every 100 live births. The percentage of still-births to live births recorded varied from 0.13 in Upper Sind Frontier district to 2.49 in Karachi district. Distribution of still-births by classes, sex, and Collectorates is shown in Annual Form No. I-A.



CHART II

DEATH RATE AT EACH AGE PERIOD 1937.



13. *Verification of Vital Statistics.*—During the year under report, 452 births were detected which were not registered. Omissions were pointed out to the Collectors concerned and necessary action was taken against the village officials responsible.

14. *Deaths.*—The year under report showed a decline in the number of deaths registered. The total number of deaths recorded was 46,860 in 1937; 48,425 in 1936, the quinquennial average being 51,494. (Graph No : I).

The number of deaths recorded in the previous years is given in the following table :—

Year.	Deaths.	Death-rate.
1901-10 (Mean) ...	68,335	21.62
1911-20 ,, ...	94,320	26.89
1921-30 ,, ...	56,174	17.23
1931 ...	46,714	12.05
1932 ...	59,067	15.23
1933 ...	54,239	13.99
1934 ...	48,489	12.51
1935 ...	47,249	12.19
1936 ...	48,425	12.49
1937 ...	46,860	12.09

15. *Death-rate as compared with those in other Provinces.*—The recorded death-rate for the Province worked out to 12.09 per mille as compared with 12.49 in 1936 and 13.28 the quinquennial mean. The following table shows death-rates per mille in the provinces of India in the last two years, viz., 1936 and 1937.

Province.	1936.	1937.
Madras ...	23.30	23.99
Bengal ...	24.50	24.70
Assam ...	19.63	22.21
Bihar ...	21.68	22.53
Orissa ...	27.84	28.63
Punjab ...	23.97	23.71
Central Provinces ...	34.89	32.63
United Provinces ...	22.61	21.38
Bombay ...	27.73	27.50
North West Frontier	17.92	21.27
Sind ...	12.49	12.09

16. *Death-rate in Collectorates.*—The death-rates recorded in the Collectorates in the Province during the year under report and the preceding year are shown in the following table :—

Name of Collectorates.	Death-rate in 1936.	Death rate in 1937.	Mean death-rate for previous 5 years.
Karachi ...	18.10	16.11	16.83
Hyderabad ...	12.61	11.62	12.44
Nawabshah...	10.40	9.74	10.95
Thar and Parkar ...	11.26	12.52	13.42
Larkana ...	11.93	11.55	12.91
Dadu ...	10.92	9.57	11.36
Sukkur ...	13.06	13.50	15.50
Upper Sind Frontier ...	7.10	8.81	9.52
Total ...	12.49	12.09	13.28

17. *Death-rates in Rural Areas.*—The death-rate in the rural areas of Sind was 10.14 as against 10.40 in the previous year showing a decrease. Of the 61 talukas and mahals, no taluka recorded a death-rate above 20 per mille of population. 34 returned death-rates between 10 and 20 and the remaining 27 returned death-rates below 10 per mille. The highest rate (15.65) was recorded in Chachro taluka (Thar Parkar District) and the lowest (5.58) in Sakrand taluka (Nawabshah District).

18. *Death-rates in Urban Areas.*—The death-rate in the urban areas of Sind was 21.00 per mille as compared with 22.78 in 1936. Of the 26 urban registration circles, 6 returned death-rates between 20 and 30 per mille, 14 returned death-rates between 10 and 20, and the remaining 6 returned death-rates under 10 per mille.

19. *Death-rate in Cantonments.*—The following death-rates were recorded in the Cantonments :—

Karachi 16.66,
Drigh Road 2.50, and
Hyderabad 6.62.

20. *Excess of Births over Deaths.*—The births registered during 1937 numbered 77,389. Out of these 50,426 were in rural areas while 26,963 were in urban areas. The total number of deaths recorded in the Province was 46,860 of which 32,430 were in rural areas and 14,430 in urban areas. The excess of births over deaths was 30,529 against 31,111 in the previous year.

21. *Deaths according to Sex.*—During the year under report 26,442 male and 20,418 female deaths were recorded giving death-rates of 12.07 and 11.98 per mille of population of males and females respectively against 12.54 and 12.42 per mille in 1936. The ratio of male to female deaths for the Province was 129.52 to 100 as against 128.79 to 100 in 1936.

22. *Deaths by Caste or Classes and by Sex*—are recorded in Annual Form No : V, Appendix III.

23. *Deaths according to Causes compared with previous years.*—The following table shows the number of deaths in 1937 and the ratios per mille of population arranged according to causes and compared with the figures for 1936 and with the average of the past 5 years.

Causes of deaths.	1936.		1937.		Mean for 5 years.	
	No. of deaths.	Ratio.	No. of deaths.	Ratio.	No. of deaths.	Ratio
Cholera ...	8	0.0002	2	0.0005	14	0.004
Small-pox ...	308	0.07	798	0.21	747	0.19
Plague ...	4	0.0001	16	0.004	1	0.0003
Fevers ...	27,679	7.14	27,410	7.07	32,802	8.46
Dysentery and Diarrhoea.	1,303	0.34	1,177	0.30	1,012	0.29
Respiratory diseases ...	10,225	2.64	9,098	2.55	8,492	2.19
Injuries ...	873	0.23	791	0.21	923	0.24
Other causes ...	8,025	2.07	7,568	1.95	7,503	1.94
Total ...	48,425	12.49	46,860	12.09	51,494	13.28

Graphs showing the incidence of deaths under the chief causes for the year under report compared with the previous year are shown in Charts I and IV. Graphs showing the annual incidence of deaths under the chief epidemic diseases, *viz.*, Cholera, Small-pox and Plague are shown in Chart No. VII.

24. *Infant Mortality*.—There were 9,134 deaths under one year giving an infantile mortality rate of 118.02 per 1,000 registered births as against 9,649 or a ratio of 121.31 in the preceding year. The male and female infantile mortality rates were 116.57 and 119.85, respectively, as against 118.33 and 125.05 in 1936. The distribution of deaths amongst the various age groups under 1 year and the percentage compared with the corresponding figures of the previous year are shown in the following table :—

Age groups.			1936		1937	
			Total deaths	Percentage	Total deaths	Percentage
Under 1 week	...	...	2,088	21.64	1,868	20.45
1 week to 1 month	...	...	1,830	18.96	1,592	17.42
1 to 6 months	...	...	3,323	34.44	3,342	36.58
6 to 12 months	...	...	2,408	24.96	2,332	25.55

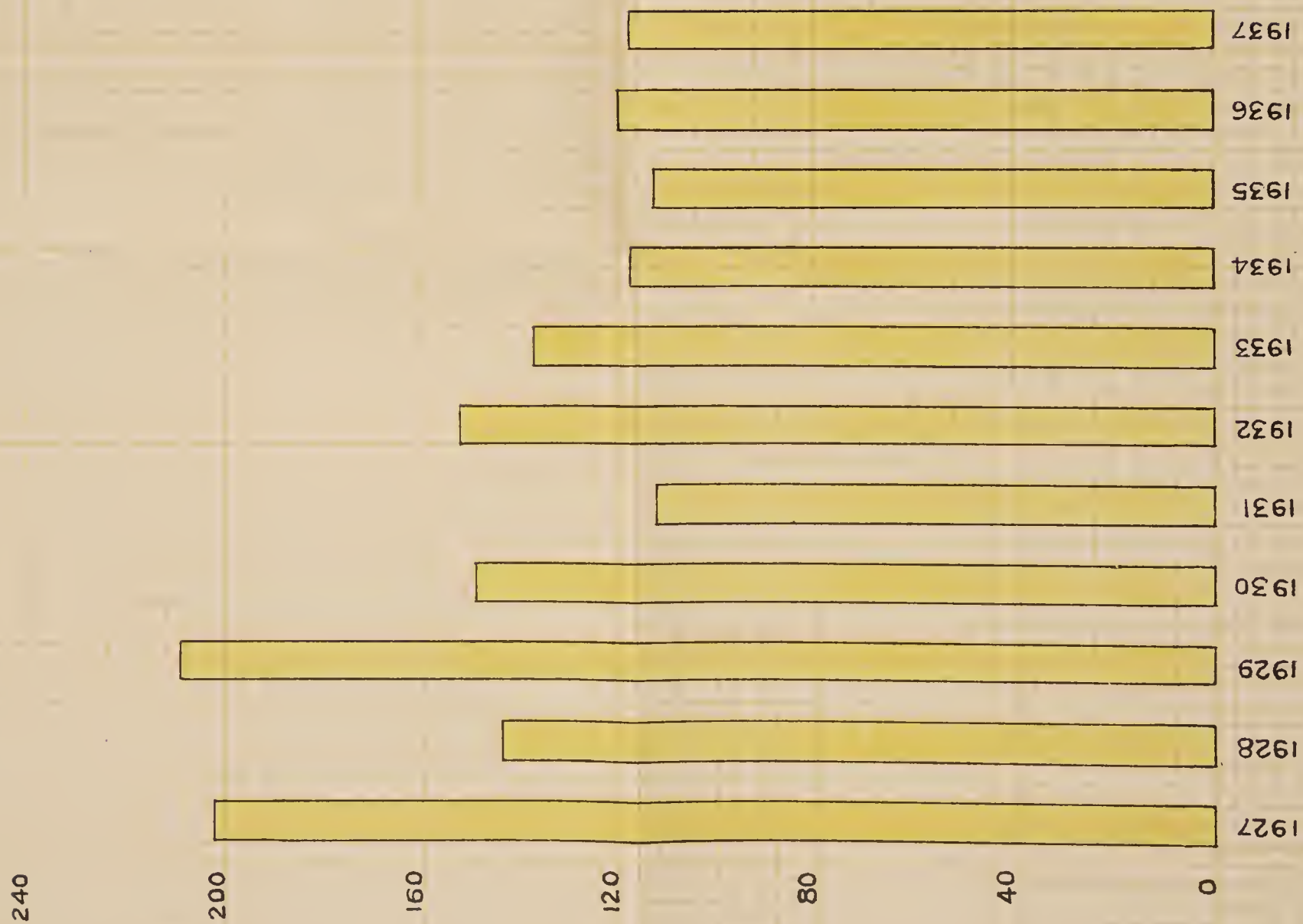
25. *Infant Mortality in the Provinces*.—Details of infantile mortality rates for individual province were as follows :—

Province.	1936.	1937.
Madras	164.04	169.70
Bengal	170.46	175.48
United Provinces	148.53	142.33
Punjab	158.44	163.04
Central Provinces	234.98	218.60
Bombay	166.08	160.74
Bihar	117.98	115.22
Orissa	205.43	214.66
Assam	150.82	160.04
North West Frontier	121.72	148.61
Sind	121.31	118.02

26. *Infant mortality in urban and rural areas*.—The urban and rural infant death-rates per 1,000 registered births were 158.32 and 96.49, respectively, as compared with 165.81 and 98.82 in 1936. The infant mortality rate during the year under report compared with previous years is shown in the following table :—



CHART III
CHART SHOWING INFANT MORTALITY RATE IN
THE PROVINCE OF SIND FROM 1927 TO 1937.



Year.	Deaths under 12 months.			Births registered.			Infant death rate per 1000 births.			Infant deaths per 1,000 of deaths.
	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total	
1937	5024	4110	9134	43098	34291	77389	116.57	119.85	118.02	194.92
1936	5227	4422	9649	44175	35361	79536	118.32	125.05	121.31	199.26
1935	4917	4023	8940	44024	34819	78843	111.69	115.54	113.01	189.21
1934	4776	3984	8760	42012	33717	75729	118.77	118.10	117.67	180.66
1933	6019	5060	11079	43639	34150	77789	137.01	148.11	142.42	204.26
1932	6509	5407	11916	43432	34544	77976	149.61	155.66	152.82	201.73
1931	5381	4476	9857	48800	39461	88261	110.27	113.43	111.68	211.01
1930	5664	4690	10354	38374	30892	59266	147.60	151.82	149.48	176.24
1929	8889	7897	16786	44744	35394	80138	198.65	223.12	209.46	195.49
1928	6411	5144	11555	44968	35354	80322	142.57	145.49	143.85	212.76
1927	6308	5361	11669	41516	33577	75193	151.58	159.63	155.19	224.71
1926	7773	6897	14670	44305	34944	79249	175.44	197.37	185.11	233.16

The following urban areas recorded very high infantile mortality rates :—

Ghotki (383.33), Tando Muhammadkhan (250.00), Tatta (243.90), Tando Allahyar (228.07), Dadu (228.07), Shikarpur (208.96), Hyderabad (205.14), Garhi Yasin (204.80). Among the rural circles, the highest infantile mortality rate was recorded in Karachi district (126.89) and the lowest in Upper Sind Frontier district (80.30).

Detailed figures are given in Annual Form No. VI (a) Appendix III.

As regards the measures taken to reduce the infant mortality, the Assistant Director of Public Health, Sind, reports :—

Karachi City.—The Karachi Municipal Corporation maintained 4 maternity homes in different parts of the City. There were also two other maternity homes, one for Parsis and

the other for Khojas. The maternity homes are provided with Anti-natal, Post-natal, and Child Welfare Clinics. There were 6 Municipal and 1 Red Cross Child Welfare Centres which did excellent work. The Health Visitors attached to them visited the homes of the people, conducted propaganda, and attended to the children that came to the centres. Besides the Lady Dufferin Hospital continued to treat maternity cases as usual.

Hyderabad Town.—The Lady Health Visitor attended the Child Welfare Centre at Trans-Fuleli Quarter twice a week and supervised the work of three midwives. She carried on the work of house visiting particularly the pregnant women and also mothers after delivery. She paid 2,663 visits as compared with 2,655 during the previous year. Of these, 1,368 visits were paid to delivered cases, 480 to waiting cases, and the remaining 815 to miscellaneous cases.

1,030 children and infants attended the Child Welfare Centre at Trans-Fuleli as against 934 in the preceding year. All the children and infants who attended the Centre were weighed and their weight recorded, and every child suffering from conjunctivities was attended to.

Sukkur Town.—The municipality maintains a maternity home which is in charge of a qualified Lady doctor. There were three B.P.N.A. nurses and one qualified dai. A Child Welfare Centre is run by the Red Cross Society and the municipality paid a grant-in-aid towards it. At the Centre the expectant mothers were advised in regard to the conditions associated with pregnancy.

Shikarpur Town.—Besides the Lady Dufferin Hospital, there was one more maternity home, *viz.*, Ishwarbai maternity home. There was also one Child Welfare Centre. The municipality paid a handsome contribution to these institutions.

Rohri Town.—The maternity home at Rohri was under the charge of a qualified lady doctor.

Larkana Town.—There was one municipal maternity home, *viz.*, Mrs. Hamidali Maternity Home and Hospital which did excellent work.

27. SUMMARY OF VITAL STATISTICS OF THE CHIEF TOWNS.

Karachi City.—Population—1931 Census—2,47,791. The number of births registered was 13,882 which was equivalent to a birth-rate of 56.02 as compared with 13,937 and 56.24, respec-

tively, in the previous year showing a decrease of 55 births. The registered deaths numbered 6,176 as against 7,087 in the preceding year. The corresponding death-rates for 1937 and 1936 were 24.93 and 28.60, respectively. The chief causes of deaths were Respiratory Diseases (2,695) and All Other Causes (2,473). Deaths from pneumonia, phthisis, enteric fever, measles and plague as compared with the previous year and their corresponding death-rates were as follows :—

			1937.		1936.	
			No.	Death-rate.	No.	Death-rate.
Pneumonia	...	...	1,565	6.31	1,752	7.07
Phthisis	...	...	575	2.32	597	2.41
Enteric Fever	...	...	35	0.14	40	0.16
Measles	...	...	45	0.18	224	0.90
Plague	...	...	14	0.05	4	0.02

The infant mortality rate per 1,000 registered births was 149.40 as against 167.04 in 1936.

Hyderabad Town. — Population—1931 Census—96.021. Births registered during the year numbered 4,080 showing a birth-rate of 42.49 per mille as against 4,243 and 44.18, respectively, in 1936. There was a decrease of 143 in the number of recorded births. The number of deaths recorded was 2,765 equivalent to a death-rate of 28.80 per mille as compared with 2,819 and 29.35, respectively, in the previous year. The Chief causes of deaths were Respiratory Diseases (918) and All Other Causes (2,765). The mortality from small-pox, measles, malaria, pneumonia, and phthisis as compared with the previous year together with their rates is as follows :—

			1937.		1936.	
			No.	Death-rate.	No.	Death-rate.
Small-pox	...	...	3	0.03	5	0.05
Measles	...	...	17	0.18	81	0.84
Malaria	...	...	330	3.44	110	1.15
Pneumonia	...	...	571	5.95	871	9.07
Phthisis	...	...	220	2.29	226	2.38

The infant mortality rate showed an increase from 198.21 in 1936 to 205.14 in 1937.

Sukkur Town.—Population—1931 Census—69,277. 2,586 births were registered equal to a birth-rate of 37.33 as compared with 2,539 and 36.65, respectively, in the previous year. The total deaths recorded were 1,014 equal to a death-rate of 14.63 as against 986 and 14.23, respectively, in 1936. The main groups under which a large number of deaths were recorded were Respiratory Diseases (340) and All Other Causes (283). 34 deaths were due to small-pox, 104 from pneumonia and 47 from phthisis. The number of deaths recorded under Respiratory Diseases, all other causes, small-pox, pneumonia, and phthisis during the previous year was 332, 292, nil, 128, and 52, respectively. The number of infant deaths was 289 or a ratio of 111.75 per 1,000 registered births as against 274 and 107.91 in 1936.

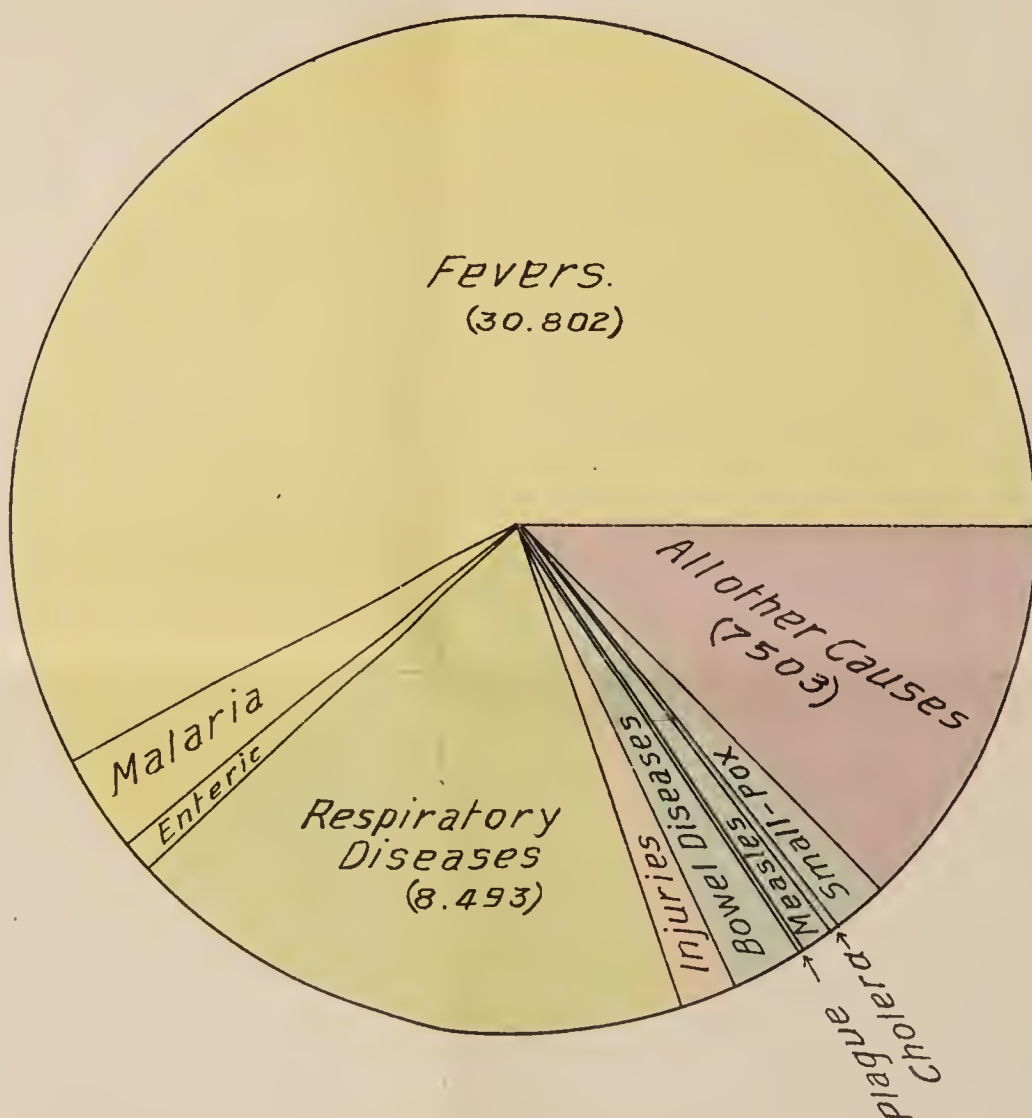
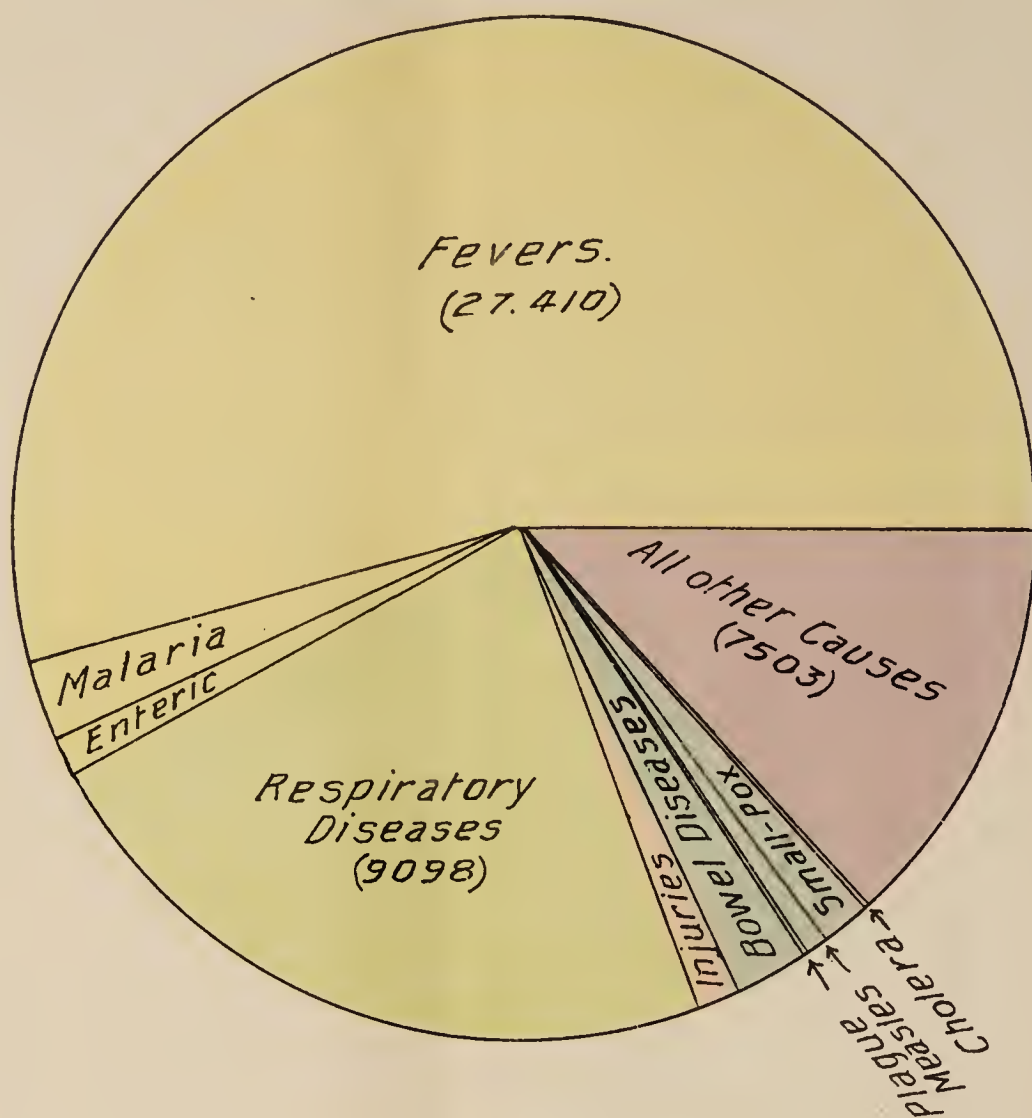
Shikarpur Town.—Population—1931 Census—62,505. Total births recorded during the year were 2,120 equivalent to a birth-rate of 33.92 as compared with 2,243 and 35.88 in the previous year. There were 1,455 deaths as against 1,662 in 1936. The corresponding death-rates for 1937 and 1936 were 23.28 and 26.58, respectively. High mortality was recorded under Fevers (443), Respiratory Diseases (147), and All Other Causes (814). Measles claimed 65 deaths, Malaria was responsible for 362 deaths. The infant mortality showed a decrease of 86 as compared with the figures of last year (529). The infantile death-rate was 208.96 as compared with 235.85 per 1,000 registered births in 1936.

Larkana Town.—Population—Census 1931—26,841. The number of births registered were 987 or 36.72 per mille as compared with 1,032 or 38.45 in the previous year. 557 deaths equal to a death-rate of 20.75 were recorded during the year as against 476 and 17.73, respectively, in the preceding year. The principal groups under which greater number of deaths were recorded were Fevers (212), Respiratory Diseases (86), and All Other Causes (236). The number of infant deaths was 176 as compared with 127 in 1936. The corresponding infantile mortality rates per 1,000 registered births during 1937 and 1936 were 180.75 and 123.06, respectively.



CHART IV

COMPARATIVE DIAGRAMS OF DEATHS BY CAUSES FOR
MEAN 1932-36 AND FOR 1937.



CHAPTER III.

The State of Public Health in the Province and History of Chief Diseases.

1. *General Remarks on the Health of the Province.*—A cursory glance at the recorded statistics shows that the year under report was a moderately healthy one, the death-rate was 12.09, as compared with 12.49 in the past year and 13.28 the quinquennial mean. As usual the "Fevers" group was responsible for the highest mortality, *viz.*, 27,410 the second being "Respiratory Diseases" which claimed 9,098 deaths and this was followed by "All Other Causes" which was responsible for 7,568 deaths. The number of deaths recorded under each head specified in the returns showed a decrease except under small-pox and plague, which however showed a slight increase.

Once again plague broke out in Karachi City. There were 17 cases and 14 deaths as against 6 cases and 4 deaths in the previous year. The infection spread to Cantonment area where 2 cases with one death occurred, and in one taluka of Karachi district, *viz.*, Mirpur Sakro, where one fatal case occurred.

The mortality due to small-pox was 798 as compared with 308 in 1936. This marked increase was due to the disease being prevalent in an epidemic form in Sukkur and Larkana districts. The number of deaths recorded in these districts was 209 and 235, respectively.

2 fatal cases of cholera were reported during the year as against 12 cases and 8 deaths in the previous year. One fatal case was reported from Tando Adam town and the other from Kot Sultan, taluka Shikarpur, District Sukkur.

Sind was entirely free from Influenza during the year under report.

2. *Fevers. (General Prevalence).*—The number of deaths ascribed to this cause was 27,410, the death-rate being 7.07 per mille of population as compared with 27,679 and 7.14 per mille in 1936, the quinquennial mean was 8.46. Fevers accounted for 58.49 per cent. of the total deaths.

3. *Fever mortality in the previous years.*—The mortality attributed to fevers during the previous 10 years is shown below :—

Year-	No. of deaths.	Death-rate per mile.
1927	38,321	11.75
1928	39,417	12.12
1929	61,581	18.89
1930	42,426	13.01
1931	31,080	8.02
1932	39,728	10.25
1933	35,742	9.22
1934	32,147	8.29
1935	28,713	7.41
1936	27,679	7.14

Distribution of fever deaths is shown in Annual Form No. X—Appendix III.

4. *Death-rates from Fevers in Collectorates.*—

Collectorate.	Death-rate in 1937.	Death-rate in 1936.
Larkana	9.24	10.09
Sukkur	9.08	8.54
Thar Parkar	8.45	7.05
Upper Sind Frontier	7.78	6.44
Nawabshah	7.45	8.20
Dadu	7.28	8.54
Hyderabad	5.55	5.64
Karachi	3.02	3.53

5. *Death-rates from Fevers in urban and rural areas.*—The death-rates for urban and rural areas were 4.02 and 7.72, respectively, as compared with 3.77 and 7.81, respectively, 1936.

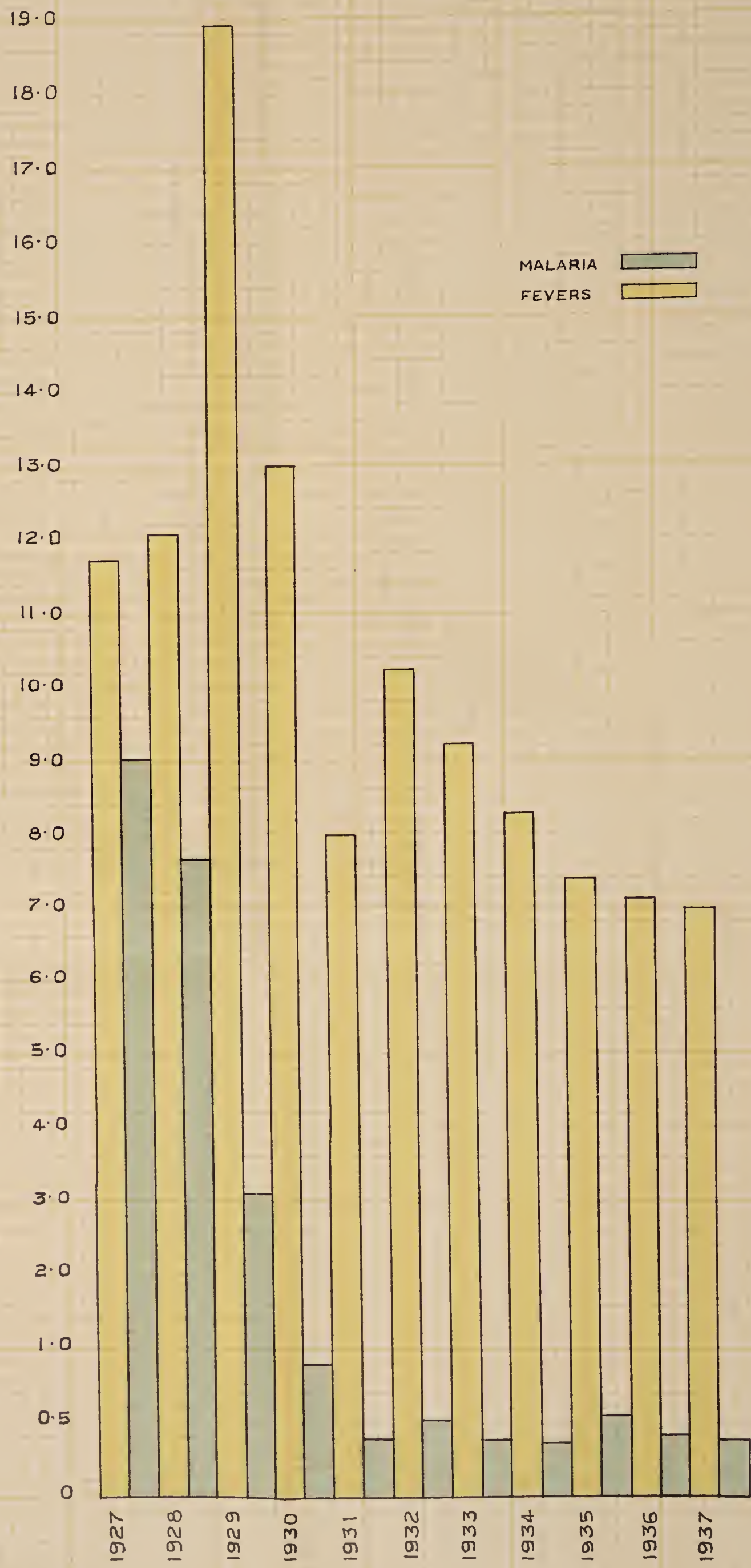
The highest urban death-rates were recorded in Ghotki (Sukkur District) 23.41, Ratodero (Larkana District) 19.75, Garhi Yasin (Sukkur District) 14.11, Umarnkot (Thar Parkar District) 12.49 and the lowest in Karachi (Karachi District) 0.79 and Sehwan (Dadu District) 3.62.

The highest rural death-rate was recorded in Sukkur taluka (Sukkur District) 13.13 and Garhi Yasin taluka (Sukkur District) 12.25 and the lowest in Keti Bunder (Karachi District) 1.81.

6. *Enteric Fever.*—The number of deaths recorded was 371 or 0.09 per mille as against 416 or 0.11 in the previous year. The mean ratio for the past 5 years was 0.10.



CHART V
CHART SHOWING MORTALITY RATE FROM
FEVERS AND MALARIA BY YEARS FROM 1927 TO 1937.



7. *Deaths from Enteric Fever in urban and rural areas.*—As usual the mortality from this cause was higher in the urban areas than in the rural areas. The number of deaths recorded in the former was 218 and in the latter 153.

The highest number of deaths from enteric fever for urban areas was recorded in Larkana (45), Hyderabad (43), Karachi (35) and Sukkur (31).

The highest mortality for rural areas was recorded in the districts of Thar Parkar (51), Nawabshah (24) and Sukkur (24).

Karachi City.—The number of deaths from enteric fever reported from Karachi City was 35 as against 40 in 1936. The water-supply of the city was of a high standard of purity. Anti-fly measures were adopted throughout the year and T.A.B. inoculations offered free of charge in the municipal dispensaries.

Hyderabad Town.—The number of deaths recorded under this head in Hyderabad town was 43 as compared with 81 during the preceding year. Houses of typhoid patients were disinfected.

The number of deaths recorded in other large towns in Sind was as follows :—

Town.		1937.	1936.
Sukkur	...	31	38
Shikarpur	...	16	57
Larkana	...	45	35
Tando Adam	...	6	8
Jacobabad	...	1	1

8. *Measles.*—The recorded mortality under this head was 355 as against 481 in the previous year. The death-rates from measles were 0.09 and 0.12, respectively, in 1937 and 1936.

9. *Deaths from Measles in Urban and Rural Areas.*—The deaths recorded in urban and rural areas were 189 and 166, respectively, showing death-rates of 0.27 and 0.05, respectively, as against 369 and 112 or 0.57 and 0.03 per mille in 1936.

The highest death-rates for urban areas were recorded in Garhi Yasin (1.49), Larkana (1.23), Shikarpur (1.04) and Ghotki (0.83).

The highest number of deaths from measles for rural areas was recorded in the districts of Sukkur (47), Nawabshah (35) and Larkana (32).

10. *Relapsing Fever*.—The province was entirely free from this disease.

11. *Kala-Azar*.—This disease is unknown to the province of Sind.

12. *Typhus*.—This disease is not common in Sind.

13. *Cerebro-spinal Fever*.—25 attacks and 15 deaths were reported during the year under report as compared with 18 attacks with 11 deaths in the previous year showing a case mortality of 60 per cent. as against 61.11 per cent. in 1936. The details are as follows :—

Name of Circle.	Attacks.	Deaths.	Date of 1st case.	Date of last case.
Ratodero T. C. ...	1	1	4th May 1937	7th May 1937
Moro R. C. ...	1	1	20th April 1937	20th April 1937
Mirpurkhas T. C. ...	2	...	31st May 1937	7th June 1937
Hyderabad T. C. ...	11	6	2nd August 1937	21st Dec. 1937
Garhi Yasin R. C. ...	6	3	5th March 1937	8th March 1937
Karachi T. C. ...	4	4	18th Feb. 1937	18th Sept. 1937

Besides this one fatal case occurred in Hyderabad Central Prison.

Deaths from Cerebro-spinal Fever in Urban and Rural Areas.—The number of deaths recorded under this head in urban and rural areas was 11 and 4, respectively. The disease prevailed in sporadic form.

14. *Respiratory Diseases. (General Prevalence)*.—Compared with 1936, the recorded mortality from respiratory diseases which was 10,225 showed a slight decrease, it being 9,098 in 1937. The death-rate was 2.35 as compared with 2.64 in the previous year and 2.19 the quinquennial mean.

15. *Deaths and death-rates from Respiratory Diseases in previous years*.—The following table shows the decennary progress of the disease in the province :—

Year.	No. of deaths.	Death-rate.
1927	5,706	1.75
1928	6,658	2.04

Year.	No. of deaths,	Death-rate.
1929	7,355	2.26
1930	7,249	2.22
1931	6,292	1.63
1932	8,149	2.10
1933	8,036	2.07
1934	7,399	1.91
1935	8,654	2.23
1936	10,225	2.64

16. *Death-rates from Respiratory Diseases in Collecto-
rates :—*

Collectorates.			1937.		1936.	
			No.	Ratio per mile.	No.	Ratio per mile.
Karachi...	...	...	3,833	6.61	4,418	7.63
Hyderabad	...	...	2,091	3.61	2,597	3.91
Nawabshah	...	...	625	1.26	557	1.11
Thar Parkar	...	...	1,255	2.65	1,258	2.69
Larkana ...	...	...	200	0.44	257	0.57
Dadu ...	...	...	304	0.91	275	0.83
Sukkur ...	...	...	740	1.19	833	1.30
Upper Sind Frontier ...	...	...	50	0.21	30	0.12

17. *Death-rates from Respiratory Diseases in urban and rural areas.*—The urban death-rate continued to be higher than the rural death-rate, the rates being 6.88 and 1.37, respectively, as against 8.46 and 1.46 in 1936.

High death-rates for urban areas were recorded in Mirpurkhas (11.00), Karachi (10.87) and Hyderabad (9.57).

Among the rural circles high death-rates were recorded in the districts of Karachi (3.46), Thar Parkar (2.48) and Hyderabad (2.00). The lowest death-rate for rural areas was recorded in Upper Sind Frontier district (0.12).

18. *Seasonal Mortality of Respiratory Diseases.*—Mortality was highest in January (1,497) and lowest in September (388). So far as the province of Sind is concerned, the prevalence of respira-

tory diseases is generally higher in cold weather months. The seasonal mortality from respiratory diseases is shown in Annual Form No : XII, Appendix III.

19. *Phthisis and measures against it.*—The mortality attributed to this cause was 1,506 equivalent to a death-rate of 0.38 per mille as against 1,584 and 0.41, respectively, in the preceding year. As a rule mortality from this disease is more in urban areas than in rural areas. This is due to the fact that better methods of diagnosis exist in major towns. The statistical information available does not represent the true index of the state of affairs. Exhaustive and systematic anti-tuberculosis campaign will alone save the populace from the threatened menace of this white scourge. T.B. propaganda work is being carried on by the Anti Tuberculosis Sub-Committee of the Provincial Branch of the Indian Red Cross Society. Propaganda was also carried on by Health Officers in large towns. The Inspectors of Sanitation and Vaccination delivered lectures, exhibited posters and distributed leaflets during their tour in the rural areas.

Karachi City.—108,914 patients were treated at the Municipal Tuberculosis Dispensary, Karachi. Of these 89,509 were suffering from Tuberculosis. 1,250 new cases attended the dispensary out of which 980 were diagnosed as tuberculosis cases. The two Lady Health Visitors visited 25,051 houses and reported 625 cases out of which 419 were tuberculosis cases. The nurse attached to the dispensary paid 3,738 visits at the houses of the dispensary cases whereas the Medical Officer paid 1,824 visits at the houses of the dispensary patients.

Hyderabad Town.—1,614 patients were admitted in the Municipal Tuberculosis Dispensary.

20.—*Deaths from Phthisis by Collectorates.*—

Collectorate.	No. of deaths 1937.	No. of deaths 1936.
Karachi	655	685
Hyderabad	334	360
Nawabshah	94	73
Thar Parkar	105	83
Larkana	68	60
Dadu	64	72
Sukkur	174	240
Upper Sind Frontier	12	11
Total	1,506	1,584

As usual, the highest number of deaths occurred in those districts in which the largest towns are situated.

21. *Death-rates from phthisis in urban and rural areas.*—The death-rate in urban and rural areas was 1.54 and 0.13, respectively, as compared with 1.68 and 0.15, respectively, in the preceding year.

The death-rates from phthisis in the 4 principal towns compared with the past year and the quinquennial mean are shown below :—

Name of Town.		Death-rate in 1937.	Death-rate in 1936.	Quinquennial mean.
Karachi	...	2.32	2.41	2.07
Hyderabad	...	2.29	2.38	1.89
Sukkur	...	0.68	0.75	0.84
Shikarpur	...	0.90	1.78	1.30

22. *Pneumonia (General Prevalence).*—During the year under report, 5,867 deaths due to pneumonia were recorded as against 6,717 in the previous year. The recorded death-rate was 1.51 as compared with 1.73 in 1936.

23. *Death-rates from Pneumonia in urban and rural areas.*—The urban death-rate was 3.87 and the rural 1.005 as compared with 4.89 and 1.09, respectively, in the previous year. The highest urban death-rates were recorded in Mirpurkhas (8.94), Karachi (6.31), and Hyderabad (5.95).

Out of the total number of 2,659 deaths recorded under this head in the urban areas, the towns of Karachi and Hyderabad were jointly responsible for 2,136 deaths. The number of deaths for individual town compared with previous year are shown below :—

		1937.	1936.
Karachi	...	1,565	1,750
Hyderabad	...	571	871

For the rural areas, the districts of Karachi and Thar Parkar recorded the highest death-rates, *viz.*, 2.99 and 1.95, respectively, as was the case during the last year when Karachi district recorded a death-rate of 2.98 and Thar Parkar district 2.00.

24. *Dysentery and Diarrhoea. (General Prevalence).*—The mortality from these diseases during the year was 1,177 or a death rate of 0.30 as compared with 1,303 or 0.34, respectively, in the previous year. The quinquennial mean and the mean death-rate were 1,012 and 0.29, respectively.

25. *Death-rates from Dysentery and Diarrhoea in the previous years by Collectorates.*—

Collectorate.	1937.	1927 to 1936 (Mean.)
Karachi ...	1.16	0.95
Hyderabad ...	0.21	0.21
Nawabshah ...	0.16	0.05
Thar and Parkar ...	0.13	0.06
Larkana ...	0.03	0.06
Dadu ...	0.07	0.12
Sukkur ...	0.36	0.17
Upper Sind Frontier ...	0.03	0.04

Dysentery.—The mortality recorded under this sub-head was 316 as against 328 in the preceding year. The corresponding death-rates were 0.08 and 0.08, respectively.

Diarrhoea.—Diarrhoea was responsible for 861 deaths as compared with 975 during last year corresponding to the death-rates of 0.22 and 0.25, respectively. The urban and rural death-rates were 1.11 and 0.03, compared with 1.25 and 0.05, respectively, in 1936.

26. *Death-rates from Dysentery and Diarrhoea in Urban and Rural Areas.*—The death-rates for urban and rural areas were 1.50 and 0.05 as compared with 1.61 and 0.08, respectively, in 1936. The highest death-rates in urban areas were recorded in Karachi (2.63), Sukkur (2.53), Ghotki (2.28), and Hyderabad (1.25) and the lowest in Jacobabad (0.06).

From amongst the rural areas, the highest mortality rate was recorded in the districts of Thar Parkar (0.12) and the lowest in Larkana district (0.02).

27. *Injuries.*—The deaths under this head numbered 791 of which 562 were males and 229 females. The mortality due to this cause recorded in the previous year was 873 of which 617 were males and 256 females; and the quinquennial mean was 0.24. Deaths from injuries for the last decade were as follows :—

Year.	No. of deaths.
1927 ...	811
1928 ...	916
1929 ...	924
1930 ...	926

Year.		No. of deahts.
1931	...	838
1932	...	938
1933	...	1,004
1934	...	916
1935	...	884
1936	...	873
1937	...	791

28. *Details of deaths from Injuries.*—Further comparison of deaths due to injuries under various sub-heads is shown in the following table :—

Causes.	1937.			1936.		
	Male.	Female.	Total.	Male.	Female.	Total.
Drowning '... ..	75	54	129	91	57	148
Poisoning	9	3	12	10	3	13
Hanging	2	7	9	3	6	9
Wounding	207	73	280	222	94	316
Wild beasts	9	3	12	23	6	29
Snake bites	186	28	214	159	29	881
Rabies	12	5	17	7	1	8
Railway accidents	4	...	4	2	1	3
Other causes	58	56	114	100	59	159
Total	562	229	791	617	256	873

29. *Deaths from Snake-bites.*—214 deaths were recorded due to snake-bite as against 188 in the previous year. The deaths by Collectorates were :—

Collectorate.	1937.	1936.
Karachi	29	26
Hyderabad	36	10

Collectorate.	1937.	1936.
Nawabshah ...	38	37
Thar Parkar ...	25	38
Larkana ...	28	36
Dadu ...	30	16
Sukkur ...	18	19
Upper Sind Frontier ...	10	6
Total	214	188

30. *Deaths from Rabies.*—17 deaths were recorded under this head as compared with 8 deaths in the preceding year.

31. *Details of suicidal deaths.*—The number of deaths due to suicide during the year were 14 as against 26 in 1936. The deaths occurred under the following heads :—

Causes.	1937.			1936.		
	Male	Female.	Total.	Male.	Female.	Total.
Drowning ...	1	...	1	4	1	5
Poisoning ...	2	...	2	2	...	2
Hanging ...	2	7	9	2	4	6
Wounding ...	2	...	2	10	3	13
Total ...	7	7	14	18	8	26

32. *Deaths from Other Causes.*—The number of deaths recorded under this head were 7,568, as compared with 8,025 in the preceding year, and 7,503 mean average of the previous 5 years, corresponding to death-rates of 1.95, 2.07, and 1.94, respectively.

The number of deaths recorded under this group during the last 10 years is as follows :—

Year.	No. of deaths.
1927 ...	5,903
1928 ...	6,204

Year.		No. of deaths.
1929	...	7,815
1930	...	6,795
1931	...	7,123
1932	...	7,658
1933	...	7,473
1934	...	6,886
1935	...	7,471
1936	...	8,025
1937	...	7,568

33. *Deaths from Child-birth.*—The year under report showed a slight decrease in the number of recorded deaths from child-birth as compared with the past year, the mortality being 881 in 1937, and 1,023 in 1936. The maternal mortality rate was 11.23 as compared with 12.86 in the previous year per 1,000 births.

34. *Deaths from Child-birth in previous years.*—The number of deaths registered during the past 5 years were as follows :—

Year.		No. of deaths.
1932	...	1,113
1933	...	1,122
1934	...	1,027
1935	...	979
1936	...	1,023
1937	...	881

35. *Deaths from Child-birth by Collectorates :—*

Collectorate,	1937.	1936.
Karachi	127	125
Hyderabad	88	162
Nawabshah	144	146
Thar Parkar	81	112
Larkana	121	122
Dadu	85	102
Sukkur	207	229
Upper Sind Frontier	28	25
Total	881	1,023

36. *Deaths from Child-birth in urban and rural areas.*—Out of the total number of 881 deaths due to child-birth 350 deaths were recorded in urban areas while 531 were in rural areas, as compared with 294 and 729, respectively, in the previous year. The mortality rates for urban and rural areas were 12.64 and 10.48 as against 11.02 and 13.79 per 1,000 births, respectively, in 1936. One woman died of child bearing to every 87 live births.

The incidence of maternal mortality in the important towns is shown below :—

Town.	Total No. of births in 1937.	Total No. of deaths from child birth in 1937.	Total No. of births in 1936.	Total No. of deaths from child birth in 1936.
Karachi	13,882	93	13,937	79
Hyderabad	4,080	58	4,243	17
Sukkur	2,586	32	2,539	33
Shikarpur	2,120	44	2,243	56
Larkana	987	22	1,032	31

37. *Diphtheria.*—The number of deaths registered was 36 or 0.009 per mille, as against 43 or 0.01 in 1936. The death-rates for urban and rural areas were 0.04 and 0.003, respectively, as compared with 0.05 and 0.002 in the previous year.

The highest death-rates in urban areas were registered in Ghotki (0.41), Mirpurkhas (0.20) and Matiari (0.15).

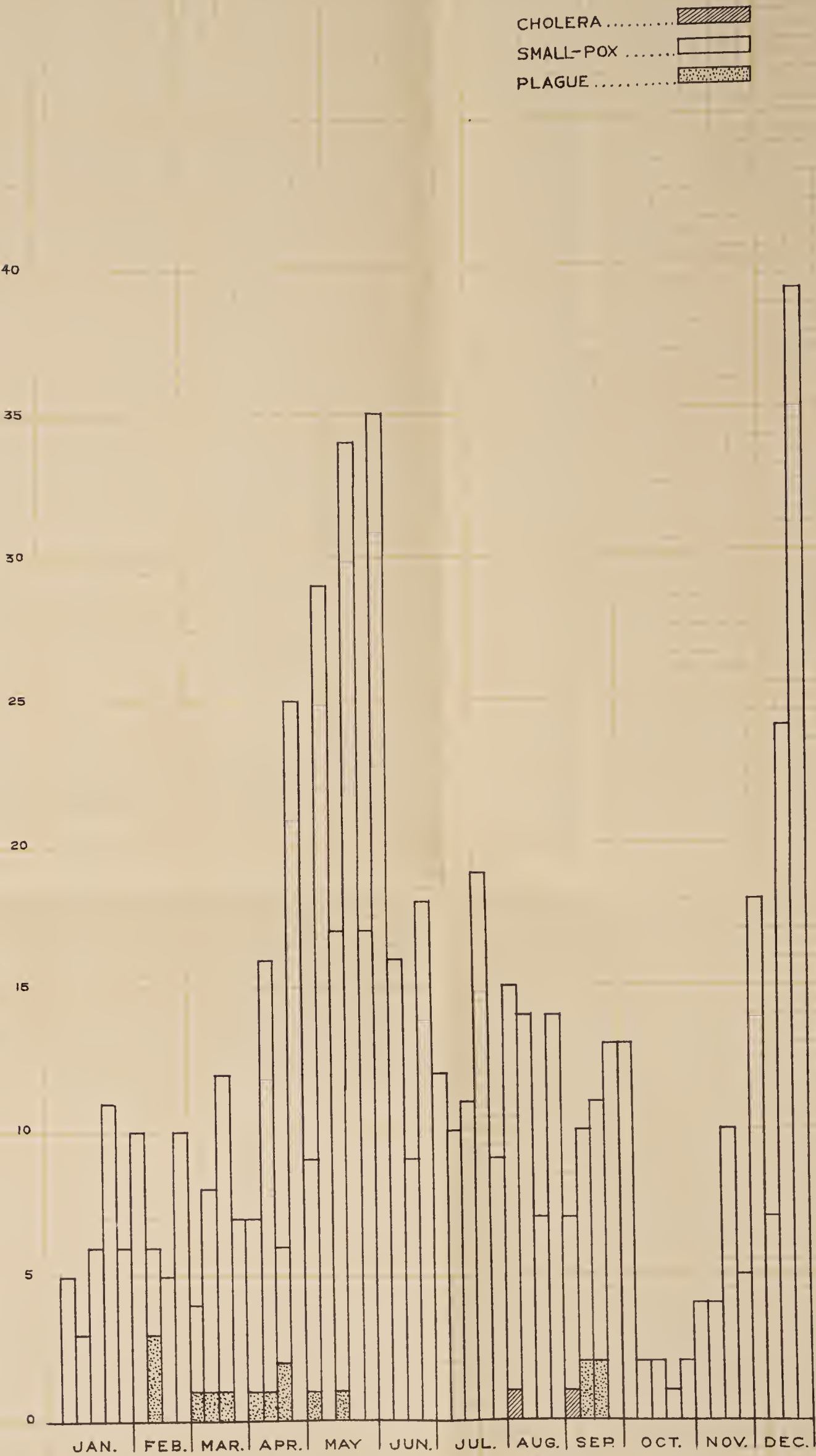
8 deaths were registered in rural areas, of which 4 were in Sukkur, 3 in Dadu and the remaining 1 in Larkana.

Karachi City.—167 cases with 18 deaths occurred in Karachi City as compared with 181 cases with 23 deaths in the preceding year. The case mortality was 10.78 as against 10.67 in 1936. Preventive measures continued throughout the year. The important preventive measure was the immunisation of the school children with Toxoid Anti-Toxin Mixture (T.A.M.). Throat swabs of all contacts were taken and examined. All contacts were immunised with T.A.M. injections. Milk samples were taken for B. Diphtheria but results were found to be negative.

38. The number of deaths from chief causes for each collectorate by months is shown in Annual Form Nos. VII to XII, Appendix III.



CHART VI
WEEKLY INCIDENCE OF DEATHS FROM EPIDEMIC DISEASES
DURING THE YEAR 1937.



CHAPTER IV.

EPIDEMIOLOGY.

1. *Cholera. (General Prevalence).*—During the year under report 2 fatal cases were reported as against 12 cases and 8 deaths in the previous year. One fatal case was reported from Tando Adam town, Nawabshah district, and the other from village Kot Sultan, taluka Shikarpur, district Sukkur. The rest of the province was entirely free from the disease. The death-rate was 0.0005 as compared with 0.002 in 1936.

2. *Deaths from Cholera in previous years.*—The following table and Chart No. VII shows the total number of deaths from cholera from 1915 to 1937 :—

Year.	No. of deaths.
1915	27
1916	1,231
1917	449
1918	2
1919	316
1920	...
1921	429
1922	25
1923	9
1924	409
1925	1
1926	133
1927	1
1928	214
1929	6,411
1930	...
1931	68
1932	15
1933	3
1934	1
1935	44
1936	8
1937	2

3. *Deaths from Cholera by Collectorates.*—Nawabshah and Sukkur Districts reported one fatal case each. The rest of the collectorates were entirely free from cholera.

4. *Deaths from Cholera in Urban and Rural Areas.*—One fatality was reported in each of the urban and rural areas. The rest were free from this disease.

5. *Brief History of Cholera.*—The outbreak was reported on 7th August 1937 from village Kot Sultan, taluka Shikarpur, district Sukkur. On receipt of the intimation regarding the occurrence of a fatal case from the above village, as S. M. S. Officer from the Civil Hospital was immediately deputed to Kot Sultan to take all preventive measures, and to inoculate the contacts and others. The S. S. M. S. Officer reported that the person attacked developed symptoms resembling cholera after consuming some decomposed fruit.

The second occurrence was reported on 1st September from Tando Adam town in Nawabshah district. The person attacked was a woman, 50 years of age, who went with a marriage party to Hyderabad and stayed at a Dharamsala where she was attacked with vomiting and diarrhoea. The next day she was removed by car to Tando Adam where a medical practitioner diagnosed and reported the case as cholera. The Assistant Director of Public Health visited the Dharamsala for further inquiries. No case of cholera in the vicinity of the Dharamsala or anywhere else in Hyderabad was reported.

6. *Preventive Measures.*—The usual precautionary measures such as inoculation of the contacts, cleanliness of the village, disinfection of water supplies, and control over the sale of decomposed or over-ripe and other food stuffs were taken.

During the year under report, 50 tubes of 10 c.c. and 50 tubes of 5 c.c. of anti-cholera vaccine were indented for emergent use. Out of these 50 tubes of 10 c.c. and 10 tubes of 5 c.c. were supplied to various agencies in Sind.

486 persons were inoculated during the year.

7. *Expenditure on Cholera.*—

Cost of Cholera Vaccine	... Rs. 62 8 0
Cost of Potassium Permanganate and Cholera pills supplied to Mukhtiar-kars and Local Bodies.	

8. *Small-pox. (General Prevalence).*—The disease was epidemic as it was reported from all districts almost throughout the year. Reported cases rose from 1,582 in 1936 to 3,899 in 1937, so also mortality which rose from 308 to 798 during the year. The death-rate was 0.21 as against 0.07 in the previous year and 0.19 quinquennial mean. The case mortality rate was 20.04 as compared with 19.47 in the preceding year.



CHART VII ANNUAL INCIDENCE OF DEATHS FROM EPIDEMIC DISEASES. 1916 TO 1937

4000

1916 TO 1937

PLAGUE

3000

2000

1000

0

1916 1917 1918 1919 1920 1921 1922 1923 1924 1925 1926 1927 1928 1929 1930 1931 1932 1933 1934 1935 1936 1937

55 DEATHS

50 DEATHS

1 DEATH

27 DEATHS

NO DEATH

4 DEATHS

16 DEATHS

CHOLERA

6000

5000

4000

3000

2000

1000

100

0

1916 1917 1918 1919 1920 1921 1922 1923 1924 1925 1926 1927 1928 1929 1930 1931 1932 1933 1934 1935 1936 1937

2 DEATHS

NO DEATH

1 DEATH

1 DEATH

NO DEATH

1 DEATH

2 DEATHS

SMALL POX

2000

1000

500

100

0

1916 1917 1918 1919 1920 1921 1922 1923 1924 1925 1926 1927 1928 1929 1930 1931 1932 1933 1934 1935 1936 1937

9. *Deaths from small-pox in previous years.*—The number of deaths and death-rates recorded during the period 1927 to 1937 is shown in the following table. This information in graphic form for the years 1915 to 1937 is shown in Chart No : VII.

Year.	No. of deaths.	Death-rate.
1927	336	0.10
1928	179	0.06
1929	747	0.23
1930	509	0.16
1931	795	0.21
1932	1,553	0.40
1933	1,093	0.28
1934	209	0.05
1935	571	0.15
1936	308	0.07
1937	798	0.21

Of 798 deaths, 128 were among infants under 1 year, 401 above 1, and under 10 years and the remaining 269 above 10 years.

10. *Deaths from small-pox by Collectorates.*—The number of cases and deaths and the death-rates recorded in each collectorate were as follows :—

Collectorate.	Cases.	Deaths.	Death-rate.
Karachi	324	75	0.13
Hyderabad	80	19	0.03
Nawabshah	243	46	0.09
Thar Parkar	433	51	0.11
Larkana	1,095	235	0.53
Dadu	334	69	0.21
Sukkur	980	209	0.34
Upper Sind Frontier	410	94	0.36
Total	3,899	798	0.21

11. *Deaths from small-pox in Urban and Rural Areas.*—Out of 26 towns and 9,095 villages in Sind, 11 towns and 185 villages were affected with small-pox. In the urban areas the high death-rates were recorded in the towns of Ghotki (3.11), Ratodero (1.93) and Tatta (1.76).

In the rural areas, the following districts recorded high death-rates :—

Larkana (0.51), Sukkur (0.34), Upper Sind Frontier (0.32) and Dadu (0.23).

12. *Steps taken by the Department in Rural Areas.*—The usual necessary precautions were taken to check the spread of the disease. As soon as the intimation regarding the outbreak of the disease was received from any rural area, the vaccination staff was immediately ordered to proceed to the affected parts and carry on vaccination work vigorously. To combat the epidemic, additional temporary vaccinators were appointed in the following districts and for the periods mentioned against each :—

Hyderabad	... 3 months	... 18th May 1937 to 17th Aug. 1937
Nawabshah	... 3 months	... 18th April 1937 to 17th July 1937.
Thar Parkar	... 3 months	... 14th May 1937 to 13th Aug. 1937.
Dadu	... 3 months	... 30th April 1937 to 29th July 1937
Sukkur	... 1 month	... 1st Dec. 1937 to 31st Dec. 1937.
Upper Sind	2 months and	10th April 1937 to 6th July 1937.
Frontier	27 days.	
Sukkur town	... 1 month and	22nd Nov. 1937 to 31st Dec. 1937.
	10 days.	

Preserved lymph from Belgaum was indented for and stocked in a refrigerator in the head office. 25,690 doses were supplied to the vaccinators in addition to their usual weekly supplies.

13. *Vaccinal Conditions.*—130 cases of small-pox were admitted to the Municipal Epidemic Diseases Hospital, Karachi. Of these, 48 were vaccinated as evidenced by the presence of vaccination marks, 74 stated to be unvaccinated and 8 unsuccessfully vaccinated. 105 were discharged and the remaining 25 proved fatal. It will be interesting to note that no fatality among the vaccinated occurred ; all these deaths were among the unvaccinated.

14. *Plague. (General Prevalence).*—Plague made its re-appearance in Karachi City this year too. The infection spread to the Cantonment area and an adjoining taluka, viz., Mirpur Sakro.

In Karachi City the disease was prevalent in sporadic form. In all 17 cases with 14 deaths were reported. This year the foci of infection was Sathwarapara (Garden East Quarter). It was however not localised in that Quarter, but stray cases were reported

from other quarters as well. The disease occurred amongst "bhayas" who came in contact with new arrivals from United Provinces where plague was prevalent during that time. Rats caught from these areas were found to be infected with *B. Pestis*. Guinea pigs injected with the blood and the serum from the bubo of the patients died within 48 hours showing signs of plague. Post-mortem examination and the culture from the spleen smears showed the presence of *B. Pestis*.

In the Cantonment area, 2 cases with 1 death occurred in the same barracks of the Indian Military. These persons were removed to the Indian Military Hospital where one of them succumbed to the disease.

As regards the outbreak of the disease in Gharo, taluka Mirpur Sakro, district Karachi, the facts were as follows :—

The case was imported from Karachi as the person left Karachi on 25th April and fell ill at Gharo on 26th. He had high fever and a bubo in the axilla.

15. *Deaths from Plague in previous years.*—The accompanying Chart No. VII shows the total number of deaths from plague from 1915 to 1937.

16. *Deaths from Plague by Collectorates.*—18 cases with 16 deaths occurred in Karachi district only, showing a death-rate equal to 0.004. The rest of the districts were entirely free from this disease.

17. *Deaths from Plague in Urban and Rural Areas.*—14 deaths were reported from Karachi City only; the disease was absent in rest of the urban areas.

From amongst the rural areas, one death was reported from Karachi district only.

18. *Deaths from Plague in Cantonment Areas.*—One death was reported from Karachi Cantonment.

19. *Ratting Operations.*—The following municipal towns carried out regular ratting operations :—

Karachi,
Hyderabad,
Mirpurkhas,
Tando Adam,
Sukkur,
Shikarpur.

The number of rats caught were 223,006. In Karachi City 82,168 rats were caught out of which 12,375 were examined at the Municipal Epidemic Diseases Hospital, Karachi, by the Bacteriological Assistant of the Chemico-Bacteriological Laboratory, Karachi.

20. *Anti-plague Measures.*—

(1) Isolation of the patients to the Epidemic Diseases Hospital.

(2) Disinfection of the infected places as well as surrounding places in the area.

(3) Inoculation with anti-plague vaccine.

(4) Rat trapping.

(5) Examination of rats from all parts of the city and particularly from infected areas.

(6) Infected huts were destroyed and the contacts provided with new huts.

(7) Daily supervision and surveillance of the area.

The following preventive measures were adopted by the Military authorities :—

(1) Patients isolated, contacts segregated.

(2) Hospital staff, patients and followers of the nearest units were inoculated against plague.

(3) Disinfection of wards ; floors were smeared with kerosene oil and soap emulsion.

(4) Hospital staff quarters and barracks room evacuated.

(5) Anti-rat measures were carried out, *viz.*, trapping, baiting. Rat holes in the adjacent areas were dealt with cyanide and sulphur gases.

21. 7,405 persons were inoculated in Karachi City and 538 in Karachi Cantonment.

22. *Flea Index.*—R. B. Dr. G. D. Chitre, L. M. & S., Plague Research Officer, Haffkine Institute, Bombay, was deputed to Karachi by the Government of Bombay at the instance of the Government of Sind, for a period of one week, in connection with flea index and to instruct the local staff entertained by the Municipal Corporation, Karachi, in methods of obtaining samples,

The entire cost amounting to Rs. 758-1-7 on account of R. B. Chitre's deputation was borne by the Municipal Corporation, Karachi.

The report of the Plague Research Officer showed that the susceptibility of Karachi rats to plague was low, *viz.*, 12.7 per cent. and the immunity fairly high, *viz.*, 87.3 per cent. All that was indicated was that probably there was little likelihood of the spread of plague in Karachi City on account of high immunity in the rat population.

23. *Influenza*.—The province was entirely free from Influenza during the year. The number of deaths recorded in the previous year was 4.

24. *Deaths from Influenza in previous years*.—The mortality due to influenza since its appearance in 1918 is shown in the following table :—

Year.			No. of deaths.
1918	...	...	190,217
1919	...	...	1,008
1920	...	...	552
1921	...	...	327
1922	...	...	128
1923	...	...	37
1924	...	...	39
1925	...	...	30
1926	...	...	20
1927	...	...	26
1928	...	...	45
1929	...	...	12
1930	...	...	6
1931	...	...	6
1932	...	...	3
1933	...	...	5
1934	...	..	14
1935	...	...	18
1936	...	...	4
1937	...	...	...

CHAPTER V.

i. *Fairs and Festivals*.—The following important fairs took place during the year in the province.

- (1) Lal Shahbaz Fair, Sehwan (Dadu District).
- (2) Bhit Shah Fair (Hyderabad District).
- (3) Oderolal Fair (Hyderabad District).
- (4) Sajan Sawai Fair (Hyderabad District).
- (5) Shah Karim Bulri Fair (Hyderabad District).
- (6) Pithoro Fair (Thar Parkar District).

The Inspector of Sanitation and Vaccination in whose jurisdiction the particular fair was held, was deputed to look after the sanitary arrangements. Wells were treated with potassium permanganate, over ripe fruit; and unwholesome foods were destroyed. No cases of infectious diseases occurred among the pilgrims at any of the fairs.

CHAPTER VI.

URBAN SANITATION (INCLUDING NOTIFIED AREAS).

1. *Number of Medical Officers of Health.*—Medical Officers of Health having British Diplomas in Public Health were employed in Karachi, Hyderabad and Sukkur. The Medical Officer of Health employed at Shikarpur possesses an Indian diploma. The 2 municipalities of Sukkur and Shikarpur have employed Medical Officers of Health possessing qualifications necessary for a first class municipality but allow the scale of pay prescribed by Government for an officer of a second class town. One Assistant Health Officer and one Deputy Health Officer having British Diplomas in Public Health are also employed in Karachi City.

2. *Number of Sanitary Inspectors.*—22 qualified Sanitary Inspectors were employed in the 7 principal towns of the province, viz., Karachi (8), Hyderabad (4), Shikarpur (3), Sukkur (3), Larkana (1), Rohri (1), Tando Adam (1) and Jacobabad (1). Besides these, qualified Sanitary Inspectors were employed in Nawabshah and Mirpurkhas towns but no Government subsidy was paid in respect of them.

3. *Municipal Sanitary Works.*—There are in all 26 municipalities with a total population of 6,67,066.

The incidence of municipal income and taxation per head of population in the larger municipalities was as follows :—

Name of the town.		Income.				Taxation.			
Karachi	...	Rs.	17	13	4	Rs.	14	10	5
Hyderabad	...	,,	10	9	2	,,	6	12	4
Sukkur	...	,,	13	7	8	,,	3	13	3
Shikarpur	...	,,	7	5	8	,,	4	13	8
Larkana	...	,,	6	8	1	,,	3	2	4

During the year, sanitary inspection of 16 towns was made by the Director of Health and Prison Services, and the Assistant Director of Public Health. In each case, a complete report was sent to the President of the municipality concerned who was requested to carry out the recommendations made in the report.

4. *Expenditure on Public Health in Municipalities.*—The expenditure on public health measures per head of population came to Rs. 1-13-10 approximately in Karachi City and averaged Rs. 2-7-1 for the remaining municipalities, entertaining subsidised health staff.

5. *Municipal Water Supplies—Results of Water Analysis.*—The water supply in Karachi continued to be maintained at a high standard of purity. Samples of untreated, and of chlorinated water were sent daily for examination to the Chemico-Bacteriological Laboratory.

At Hyderabad the water is sedimented and chlorinated with perchloron. Occasional samples were sent to the Laboratory for examination.

The Sukkur water supply is of a high standard of purity. The water is sedimented, filtered, and chlorinated with bleaching powder. Patterson's Rapid Filters are in use. Samples were sent to the Laboratory for examination.

At Jacobabad, the water is pumped from wells situated three miles away from the town to a high service tank. The water is permanganated at the source. Samples of water were sent periodically to the Laboratory for examination.

Only a portion of Rohri town is provided with a pipe water supply. Water is pumped into a high tank from the river and permanganated. No sedimentation or filtration is done.

6. *Infectious Diseases Hospital.*—The Infectious Diseases Hospital, Karachi, which is maintained by the Municipal Corporation is the only one of its kind in the province.

The work for the construction of the Infectious Diseases Hospital at Hyderabad has not yet commenced.

At the Municipal Infectious Hospital, Karachi, 620 cases were treated for different diseases of which 68 proved fatal.

7. *Housing Conditions in Urban Areas.*—There were no improvement trusts or other bodies concerned with the improvement of houses in any of the towns in this province. There were a number of Co-operative housing societies to whom the Karachi Municipal Corporation have given lands on concessionary terms. Such societies have built houses for their members on tenant owner basis. The Karachi Municipal Corporation followed a consistent policy of opening up congested areas and improving narrow streets and roads. The Corporation have a set of building rules providing for the construction of houses on sanitary principles. Co-operative housing societies also exist in the towns of Hyderabad, Shikarpur and Dadu.

There were no Industrial housing schemes in the urban areas of the province. The Karachi Port Trust, the North-Western Railway, and the Karachi Municipal Corporation have provided a number of quarters for their low paid staff. The Corporation have also sanctioned a 5 year plan for the construction of additional quarters for their low paid staff.

CHAPTER VII.

RURAL SANITATION.

District Health Officers.—Although Government pay a grant in aid to the extent of 2/3rds of the pay of the Health Officer if appointed, none of the District Local Boards, except Larkana, have appointed a District Health Officer. Unless the Local Boards Act is amended so as to make it obligatory for each District Local Board to appoint a qualified Health Officer, there appears to be little likelihood of the District Local Boards, exercising the option of appointing Health Officers. Such a step seems essential for improving the sanitary condition in the rural area.

2. *Land acquisition in villages.*—During the year no land was acquired for the purpose of relieving overcrowding in villages.

3. *Housing conditions in Rural Areas.*—The housing condition in rural areas is far from satisfactory, although no regular survey of the same has been undertaken. There appears to be no great congestion, nor are there many people without a shelter of some kind or the other; but with the exception of that a few rich and educated zamindars and merchants, of a primitive kind, built of mud, or grass, reeds or mats. They are usually built without any plan or plinth, and have rarely any arrangement for proper ventilation. Men, animals, manure and grain—all are accommodated in the same house and its courtyard. Nothing material has so far been done to ameliorate the housing conditions in the rural areas by the District Local Boards. There were no industrial housing or any building societies, co-operative scheme, improvement trusts functioning in the districts.

4. *Village Water Supply.*—Government placed at the disposal of the Revenue Commissioner for Sind, the amount of Rs. 28,000 for the improvement of village water supply. (Rs. 18,000 for village water supply and Rs. 10,000 for digging wells).

39 draw wells were newly constructed in the following districts :—

Karachi	...	5
Hyderabad	...	9
Thar Parkar	...	16
Larkana	...	8
Dadu	...	1
Total		39

5. *District and Taluka Local Boards.*—All the Taluka Local Boards have been abolished.

The expenditure on District Local Boards on public health measures varied from 8 per cent. in Larkana district to 3 per cent. in Dadu district of their respective income.

The average expenditure on public health per head of population varied from Re. 0-2-2 in Larkana district to Re. 0-0-8 in Dadu district.

6. *Village Sanitary Boards.*—There was only one Sanitary Board at Shahpur Chacker, taluka Shahdadpur, district Nawabshah.

7. *Sanitary Committees.*—There were 216 Sanitary and Notified Area Committees in the Province.

CHAPTER VIII.

MALARIA.

1. *Incidence*.—During the year 1,514 deaths due to malaria were recorded as compared with 1,627 deaths in the previous year. The death-rates in 1936 and 1937 were 0.39 and 0.42, respectively.

2. *Deaths from Malaria in Collectorates*.—The number of deaths recorded in each collectorate were as under :—

Collectorate,	No. of deaths 1937.	No. of deaths 1936
Karachi	109	265
Hyderabad	397	197
Nawabshah	49	59
Thar Parkar	66	133
Larkana	146	141
Dadu	102	172
Sukkur	613	621
Upper Sind Frontier	32	39
Total	1,514	1,627

3. *Relation of deaths from Malaria to deaths from Fevers*.—During the year, 27,410 deaths from fever were recorded out of which 1,514 were due to malaria, the percentage of deaths from malaria to those from fevers being 5.52 as against 5.87 in the preceding year.

4. *Seasonal Mortality of Malaria*.—The highest mortality from malaria was recorded in November (184) and the lowest in February (81).

5. *Deaths from Malaria in Urban and Rural Areas*.—The mortality from malaria in urban and rural areas was 1,092 and 422, respectively, as against 819 and 808 in the previous year. The corresponding death-rates for urban and rural areas were 1.58 and 0.13 as against 1.26 and 0.42, respectively, in 1936.

The highest death-rates from malaria in urban areas were recorded in Ghotki (6.63), Shikarpur (5.78), Rohri (5.27), Sehwan (4.88), Larkana (3.54), and Hyderabad (3.44) and the lowest in Karachi (0.10).

From amongst the rural areas, the highest death-rates were recorded in the districts of Karachi (0.24), and Dadu (0.16) and the lowest in Nawabshah (0.09).

6. *Anti-malaria Measures.*—Of the towns in Sind, Karachi had a fairly adequate anti-malaria staff. Hyderabad had a small anti-mosquito brigade. Anti-malaria work in other municipal towns entitled to Government subsidy, was carried out by the qualified health staff employed by them. In some of the towns, oiling and filling of pits were carried out while in others quinine tablets were distributed free.

Rural Areas —No anti-larval or anti-mosquito measures were carried out in any of the districts. Larkana District Local Board distributed quinine free in their area.

7. *Government Measures.*—The following measures were to combat the disease :—

(a) *Appointment of Touring Medical Officers.*—Ten temporary Touring Medical Officers were appointed during the malaria season to tour in such rural areas where in the ordinary course medical aid was not available. In addition to treating the patients for malaria or other complaints, they were required to take the spleen index, map out mosquito breeding places, send mosquitoes to the Assistant Director of Public Health for identification, send blood slides for examination for malaria parasites and gametocytes, and advise the villagers regarding simple preventive measures against malaria and the value of quinine in the treatment of malaria. The touring medical officers visited 461 villages, treated 8,448 persons for malaria and 9,366 for other complaints. They also examined 9,245 children and adults for enlarged spleens of which 2,353 were found to have enlarged spleens giving a spleen rate of 25 per cent.

During the year 166,268 malaria cases were treated in the hospitals and dispensaries in Sind as compared with 286,153 in the previous year.

(b) Manufacture and cheap sale of mosquito nets.

(c) Propaganda by means of widespread distribution of posters and leaflets as regards the personal preventive measures against malaria and the value of quinine in the treatment of malaria.

(d) Free distribution of quinine tablets to the population in rural areas, where medical aid was not available, through the agency of (1) Officers of the Public Health, Revenue and Educational Departments, (2) Administrative Officers of District School Boards, and (3) Philanthropic and voluntary societies. Cheap sale of quinine to Government departments and to the public through the post offices.

(e) Starting of the fishery for the supply of larvivorous fish to the local bodies.

8. *Distribution of Quinine*.—During the financial year 1937-38, Government sanctioned Rs. 30,000 for the cheap sale and free distribution of quinine.

Two hand tablet making machines were purchased and the tablets are now made at the Hyderabad Central Prison. The work of the manufacture of the tablets was supervised by the Jailor who had been specially deputed to the Yervada Prison, Poona, to acquaint himself with the technique, etc., of the industry. Government also sanctioned the appointment of a temporary junior clerk for the purpose.

During the year, 11,90,800 (5 gr.) and 2,988,250 (2 gr.) quinine sulphate tablets were manufactured of which 445,000 (5 gr.) and 1,415,000 (2 gr.) were supplied to the various agencies referred to in paragraph 7 supra. 2,28,600 (5 gr.) Hydrochloride tablets were manufactured out of which 215,400 were sold to the Government departments. The details are as follows :—

	Rs.	a.	p.
1. Quinine sulphate tablets to Post Offices for cheap sale ...	1,673	4	0
2. Quinine Hydrochloride treatments sold to Government departments	4,680	0	0
3. Quinine sulphate tablets sold to local bodies at concession rates for free distribution ...	1,315	14	0
4. Quinine sulphate tablets for free distribution ...	12,605	10	0
5. Quinine sulphate powder and tablets, sold to Government Departments ...	1,818	7	0

9. *Special Inquiries and Investigations*.—The Assistant Director of Public Health, Sind, carried out a malaria survey of Mirpurkhas town and investigated the causes of mosquito breeding and the subsequent prevalence of malaria and suggested the remedial measures. The Mirpurkhas Municipality has not yet seen its way to carry out the suggestions contained in the Report.

CHAPTER IX.

MATERNITY AND CHILD WELFARE.

(a) *Pre-natal care*.—It is only in towns in which there are maternity hospitals having ante-natal clinics, or where there are separate clinics run by the Health Associations or Red Cross Society where pre-natal care is possible. Some of these centres are under the charge of women doctors or trained midwives, and to some of which women health visitors are attached.

(b) *Hospital care—Maternity Hospital provision*.—There are no maternity hospitals in Sind run entirely by Provincial Government, but it pays a contribution towards the Lady Dufferin Hospital, Karachi, the Karachi Health Association Maternity Home, R. B. Chandiram Verhomal Maternity Home, Rohri, and Margaret Gibson Maternity Home, Sujawal.

(c) *Treatment of Puerperal Sepsis*.—There are no isolation or special hospitals for puerperal sepsis, but nearly all the larger hospitals have special septic wards. There are no special arrangements for the home nursing of such cases.

(d) *Post-natal care*.—There are arrangements for Obstretrical examination after the puerperium in most of the large hospitals. The Karachi Municipal Corporation and the Red Cross Society run Post-natal and Midwifery Clinics at Karachi.

Maternity Homes and Hospitals and Child Welfare Centres in Urban and Rural Areas.—In Karachi City there are 8 maternity homes and hospitals, viz., The Lady Dufferin Hospital, which is Government-aided, four Municipal Maternity Homes, the Karachi Health Association maternity hospital, and two maternity homes intended only for the Parsi and Khoja communities, respectively. In the city there are 7 Child Welfare Centres of which 6 are municipal and 1 conducted by the Red Cross Society.

At Hyderabad there is one maternity hospital—the Lady Dufferin Hospital and one Municipal Child Welfare Centre.

At Shikarpur there is a Lady Dufferin Hospital and the Ishwari-bai Maternity home which is conducted by a philanthropic society.

At Sukkur there is a municipal maternity home, a Mission hospital for women and a Red Cross Child Welfare Centre.

At Jacobabad, there is the Lady Willingdon Maternity Hospital and a Red Cross Child Welfare Centre.

At Rohri, Larkana, Kambar, Tatta, and Matiari, there is one municipal maternity home in each of the towns and at Dadu and Nawabshah there is one Red Cross Society maternity home.

2. *Rural*.—There are 18 Local Board maternity homes in Sind—14 in Larkana district, 2 in Upper Sind Frontier district, 1 in Sukkur district and 1 in Karachi district.

The Red Cross Society have established 2 maternity homes in Sukkur district and 1 in Upper Sind Frontier.

Trained dais have been appointed in the following villages and are working under the supervision of the local medical officers :—

Kandiaro, Mehrabpur, Tharushah, and Bhiria in Nawabshah district and Chak in Sukkur district.

A supervisor has been appointed by the Red Cross Society to inspect the Local Board maternity homes in Larkana district.

3. *The Lady Graham Dais' Improvement and Village Uplift Scheme*.—The institution maintains 6 welfare centres in the province and representatives of the institutions go on frequent tours to render help to the untrained dais and village folk by holding classes of instruction on clothing, health and maternity, and child welfare.

During the year, 43 villages were visited, 11,971 people attended lectures, 34 dais were trained, 7 of them appeared for examination and all of them passed. Besides, the work of 55 dais was supervised.

CHAPTER X.

School Hygiene and Medical Inspection of School Children.—The Hyderabad Municipality is the only one of its kind which employed a part time medical officer to carry out systematic medical inspection of school children. He inspected 25 municipal primary schools and examined 2,428 students.

The Assistant Director of Public Health during his tour visited schools to inspect the sanitary and vaccinal conditions.

The Inspectors of Sanitation and Vaccination in Sind visited 72 schools to inspect the vaccinal condition of the school children and to inspect sanitation, ventilation, and water supply. They examined 3,156 children for enlarged spleens and found 502 with enlarged spleens. They delivered 41 lectures on tuberculosis and general hygiene.

CHAPTER XI.

HEALTH PROPAGANDA.

The work done by different Associations was as shown below :—

1. *Karachi Health Association*.—The Association employed 2 qualified lady doctors—(1) the medical officer-in-charge maternity home, and (2) the resident medical officer of the maternity home. During the year 1,819 cases were attended at the Ante-natal Clinic, and the Lady Health Visitors and Midwives of the Association visited 1,318 ante-natal cases in various quarters of the town. 1,015 cases were conducted at the Karachi Health Association maternity home. Out of these, 617 were normal cases, 66 abnormal, 24 premature, 121 waiting cases, 93 complete abortion and evacuation cases, 75 threatened abortion and miscarriage and 19 miscarriage. The outdoor midwives conducted 1,517 cases in various quarters of the town.

2. *Red Cross Society (Sind Provincial Branch)*.—The Society continued to maintain child welfare centres at Karachi, Jacobabad and Sukkur and maternity homes at Thul, Sultankot, Nawabshah and Dadu. It employed two Health Visitors, two nurses, two nurse-dais and six trained dais. The Provincial Organiser of the Society visited 52 towns and villages during the year giving 117 lectures and visiting 80 Junior Red Cross Groups. The Society also held a Red Cross Week and Health Exhibition.

3. *Public Health Department*.—The Public Health Department carried out public health propaganda by means of exhibiting models and charts on health and hygiene at the Swadeshi Exhibition, Karachi, and the Agricultural-cum-Industrial Show at Hyderabad.

Anti-malaria propaganda was carried on by means of lectures and illustrated charts. Leaflets on malaria were widely distributed. The cheap mosquito net was demonstrated at the above shows as well as by the touring medical officers and the Inspectors of Sanitation and Vaccination.

Tuberculosis propaganda was carried on by means of pictorial posters on the signs and symptoms, causation and prevention of tuberculosis. The Inspectors of Sanitation and Vaccination delivered lectures on tuberculosis in some schools visited by them.

4. *Village uplift*.—Allotments from the Government of India grant Rs. 1,38,000. Expenditure upto 31st December 1937, Rs. 87,750. The expenditure was incurred on (1) establishment of Seed and Implement Depots, (2) Improvement of Cottage Industries, and (3) improvement of water-supply in villages and sinking of wells, particularly tube-wells, improving and deepening of tanks, construction of bathing ghats, levelling of streets and paving of bazaars, construction of approach roads to villages, drainage, supply of cess pool carts, laying out of parks. Expenditure was also incurred on the training of dais and the employment of touring medical officers.

CHAPTER XII.

PUBLIC HEALTH ADMINISTRATION.

1. *General Administration of the Department. Budget allotments, increases and decreases, etc.*—The Administrative head of the public health department is the Director of Health and Prison Services, Sind, who is also the head of Medical and Jail departments. There is one Assistant Director of Public Health and one Officer-in-charge, Chemico-Bacteriological Laboratory, Karachi. The subordinate staff consists of 5 Inspectors of Sanitation and Vaccination and 63 vaccinators. The Laboratory has a Bacteriological Assistant and two Chemical Assistants and clerical and menial staff.

The municipalities in Sind employed 6 qualified Health Officers (3 in Karachi city) and 23 qualified Sanitary Inspectors. None of the District Local Boards except Larkana, have appointed a District Health Officer or any health staff. The District Local Board, Larkana, receive grant-in-aid to the extent of 2/3rds the pay of the Health Officer.

Appendix I and I-A show the qualified health staff employed in the rural and urban areas and particulars of maternity and child welfare centres, health visitors and trained midwives in rural and urban areas, respectively.

Appendix II shows the annual income and expenditure of the Public Health Department during the year 1937-38. The total amount given by Government to Local Bodies as grants-in-aid towards the pay of the health staff and vaccination establishment was Rs. 19,368-3-0. The total expenditure including this amount was Rs. 61,256-0-0.

2. *Selected District.*—The system introduced in 1910 by which the control of vaccination in one district in Sind, *viz.*, Sukkur is exercised by the Local Board of that district was continued throughout the year.

3. *Training of Public Health Personnel.*

Training of Sanitary Inspectors.—There was no recognised institution in the province of Sind for the training of Sanitary Inspectors.

CHAPTER XIII.

VACCINATION.

(This chapter and all statistical tables connected therewith refer to the period 1st April 1937 to 31st March 1938).

1. *Changes in the strength of establishment.*—The permanent strength of the vaccination establishment during the year 1937-38 remained unchanged.

2. *Primary Vaccinations.* (*Appendix IV, Statement I.*)—138,537 persons were primarily vaccinated as against 123,162 in the previous year showing an increase of 15,375.

3. *Results.*—Out of 138,537 primary vaccinations 127,931 or 92.35 per cent. were successful and 265 or 0.20 per cent. were unsuccessful and in the remaining 7.45 per cent. the results could not be ascertained.

33 persons were vaccinated a second time owing to the failure of the first operation.

4. *Age and Sex.*—Of the primary vaccinations, 73,122 or 52.78 per cent. were infants under one year of age, 58,012 or 41.87 per cent. children between the ages of one and six years and 7,403 or 5.35 per cent. of children over 6 years of age. By sex, 74,945 were males and 63,592 females equal to a proportion of 117.19 to 100.

5. *Revaccination* (*Appendix IV, Statement I.*)—During the year under report the number of persons revaccinated was 105,987 as against 46,041 in the previous year showing an increase of 59,946.

The percentage of successful revaccinations was 11.36. The results could not be ascertained in 52.03 per cent. of cases.

6. *Vaccination of Pilgrims at Karachi.*—During the year under report a temporary vaccination establishment consisting of one male vaccinator, one female vaccinator, one clerk, and one cooly was entertained in Karachi City for the vaccination of pilgrims proceeding to Hedjaz. In all 8,585 pilgrims were vaccinated between 8th October 1937 and 27th January 1938. Of these 6,762 were males and 1,823 females. The total expenditure incurred on the vaccination establishment for the vaccination of these pilgrims amounted to Rs. 685-3-0 and was borne by Government. In the year 1936-37 7,029 pilgrims were revaccinated at a total expenditure of Rs. 683-14-0. The cost of lymph for the vaccination of pilgrims amounted to Rs. 431-4-0.



CHART VIII
 INSERTION SUCCESS RATES OF PRIMARY VACCINATIONS
 WITH GLYCERINATED LYMPH IN THE PROVINCE OF SIND &
 KARACHI CITY FOR THE YEARS 1935-36, 1936-37 & 1937-38



Sind
 Karachi city

Vaccination in Police Lines and Outposts was carried out regularly.

7. *Primary and Revaccination in Indian States.*—In accordance with Government Resolution No. 9083, dated 8th February 1935, General Department, the control of supervision of vaccination work in Khairpur State was handed over to the State from 1st April 1935.

8. *Cost of Vaccination.*—The cost of vaccination amounted to Rs. 105,335-11-10 as against 100,759-9-6 in the previous year. The average cost of each successful case of vaccination was 0-12-0 against 0-13-8 in the preceding year.

9. *Vaccine Institute.*—There is no Vaccine Institute in the province of Sind. and supplies of glycerinated calf lymph continued to be obtained from the Vaccine Institute, Belgaum. 25,750 doses of lymph were sent for and stored in the Head Office refrigerator for emergent use, out of which 25,690 doses were supplied to vaccinators in addition to their regular weekly supplies.

10. *Compulsory Vaccination.*—Excluding the 2 cantonments of Karachi and Hyderabad, the Bombay District Vaccination Act, 1892, is in force in the following towns :—

Town.	Date of application of the Act.
Karachi ...	... October 1879.
Hyderabad	... February 1914.
Sukkur	... June 1904.
Shikarpur...	... July 1933.
Rohri ...	... June 1904.
Larkana ...	... April 1899.
Hala ...	... September 1936.
Nasarpur ...	... September 1936.

During the year, 200 prosecutions were instituted under the Act in Karachi, Hyderabad, Sukkur, Shikarpur, Rohri, and Larkana town, of these 174 persons got their children vaccinated before the cases were heard, 11 were fined, 3 died, 2 were warned, 9 were pending and 1 was not traceable.

11. *Diagram.*—Nil.

12. *General Remarks.*—This department had met with little success in inducing the Jacobabad Municipality to accede to the request of introducing compulsory vaccination in that town. The matter had been opened with renewed efforts but every time the municipality had been adamant in their attitude and turned down the proposal. The municipalities of Tatta and Dadu gave a satisfactory response and the matter was not finally decided by the end of the year.

Bye-laws are in existence for the compulsory registration of births and deaths in municipal towns, but registration is very defective in small towns. The Assistant Director of Public Health during his inspection drew the attention of the municipal authorities to such defective registration of births and deaths and suggested means to improve the system of registration but progress in this respect is not marked.

The registration of vital statistics is not compulsory in rural areas.

During the year under report no cases of inoculation with small-pox virus were reported.

Ill effects of Vaccination.—No ill effects were reported to have occurred after vaccination.

During the year 1937-38, 6 candidates were trained in vaccination. There were in all 23 candidates on the list of waiting candidates for service in Sind.

CHAPTER XIV.

OTHER PUBLIC HEALTH SERVICES.

Public Health Laboratories.

1. *Chemico Bacteriological Laboratory, Karachi.*—From 1st January to 31st March 1937, Mr. H. C. Hiranandani officiated as Officer In-charge, Chemico Bacteriological Laboratory, Karachi. Mr. O. M. Akbani, D.P.H., the newly appointed Officer In-charge, Chemico Bacteriological Laboratory took over charge on 1st April 1937, and remained in charge during the remaining period of the year. The Laboratory has two sections, *viz.*, a Chemical Analyser's Section and a Public Health Section. The report of the Chemical Analyser's Section is published separately.

2. During the year under report 20,214 samples were examined in the Public Health Section of the Laboratory. The year was conspicuous for the highest number of samples examined as can be verified by the following table. Owing to the increased work, the Laboratory staff was increased with the appointment of a temporary additional establishment consisting of a junior chemical assistant, a junior clerk and a laboratory assistant.

*Table showing the work done under all heads
during the last 5 years.*

Kind of samples.	1933.	1934.	1935	1936.	1937.
Chemical examination of water ...	1,181	1,118	1,098	895	461
Bacteriological examination of water.	2,244	2,722	3,005	1,508	2,110
Public Analyst's work (Articles of food under the Adulteration Act.)	1,522	1,211	2,349	3,940	3,857
Food stuffs (other) ...	174	228	96	120	113
Diagnostic work ...	1,293	2,405	2,150	3,451	13,616
Miscellaneous work ...	66	93	53	2	57
Total ...	6,480	7,777	8,751	9,916	20,214

3. *Examination of water supplies.*—Karachi—369 samples of water were examined chemically and 2,001 bacteriologically. Apart from daily samples of untreated and chlorinated water sent to the

laboratory, a large number of samples are sent from different parts of the city and from areas where contamination of mains is suspected or where the incidence of intestinal diseases indicates contamination of water supply. Daily tests are made at the laboratory to find out the dose of chlorine required. This is communicated by telephone to the Chlorinating Station. The standard of purity of the Karachi water supply as ascertained from Laboratory examination is fairly high.

Sukkur.—96 samples of filtered and chlorinated water were tested Bacteriologically and 12 samples chemically. Besides 44 samples of Bleaching Powder and 2 samples of alum were also examined.

Hyderabad.—The samples of water tested for the municipality for the year numbered 13 only.

Jacobabad.—21 samples of water were examined chemically.

4. Diagnostic work.—During the year, 13,616 examinations were made under this head. These included Bacteriological, Microscopic, and Chemical examinations of urine, faeces, sputa, throat swabs, blood slides, blood cultures, Widal's tests, cerebro spinal fluid, Kahn's test, serum smear for P. Pestis, autovaccines, disinfectants, and the examination of rats for P. Pestis. During the outbreak of plague in Karachi city, the Bacteriological Assistant of the Laboratory carried out post-mortem examination of rats at the mortuary of the Municipal Epidemic Diseases Hospital, Karachi.

5. *Public Analyst (Food Adulteration)*.—The Bombay Prevention of Adulteration Act, 1925, was in force in the following towns.

Town.	Date of application of the Act.	
Karachi	...	1930
Shikarpur	...	1935
Hyderabad	...	1936
Tatta	...	1937

The number of samples of articles of food stuffs examined at the laboratory on behalf of the above municipalities is shown below :—

Karachi	...	3,376
Shikarpur	...	263
Hyderabad	. . .	. 218

Industrial Hygiene including Hygiene of Mines.—The Assistant Director of Public Health continued the inspection of factories (under the Factory Act) in his capacity as *ex-officio* Inspector of Factories and submitted reports when necessary to the Manager of the Factories inspected and to the Inspector of Factories, Sind. Special attention was paid to the lighting, ventilation, water supply, sanitary arrangements, lime washing, and first aid outfits of the factories were inspected by the Assistant Director of Public Health, Sind.

There are no mines in Sind.

PORT OF KARACHI.

General Remarks.

7. During the year under report no epidemic of any serious nature occurred on any vessel entering or leaving the port of Karachi or during its stay in the port. The port of Karachi was completely free from cholera. Small-pox prevailed in sporadic form. 15 cases of, and 10 deaths from plague were reported from February upto the end of April 1937. In the month of September again another sporadic outbreak took place, there occurring 4 cases with 4 deaths. During the prevalence of the disease, anti-rat campaign in the harbour area was intensified.

8. *Out-going Vessels.*—Eight hundred and forty seven vessels sailing for ports beyond India were granted Bills of Health. Of these 399 were steam ships and 448 country crafts.

9. *In-coming Vessels.*—98 vessels including 8 pilgrim ships and 4 country crafts came in quarantine.

10. *Synopsis of outward and inward Medical Inspection and Disinfection performed during the year 1937 :—*

	Vessels.			Crew and passengers.		
	Steamers	Country crafts.	Total.	Steamers.	Country crafts.	Total.
Out-going ...	399	448	847	58,095	5,256	63,351
In-coming ...	98	4	102	18,714	56	18,770
Total ...	497	452	949	76,809	5,312	82,121

11. *Plague and Cholera.*—No case of these diseases was detected during the Medical Inspection of passengers and crews of vessels bound for ports beyond India.

12. *Small-pox.*—M. V. “Hydri” :—The vessel arrived here from Kathiawar Coast Ports on 24th April 1937. The Master reported one case of small-pox amongst the deck passengers. The patient was sent to the Municipal Epidemic Diseases Hospital, Karachi, for treatment and necessary sanitary measures were carried out.

S.S. “Barala” :—During the Medical Inspection of deck passengers to be embarked on this ship on 9th May 1937, a case of small-pox was detected. The patient was sent to the Epidemic Diseases Hospital, Karachi, for treatment and his immediate contacts were also prevented from embarking.

13. *Chicken-pox.*—The following vessels arrived with cases of chicken-pox on board :—

Name of vessel.	Date of arrival.	From	Cases amongst crew.	Cases amongst passengers
1. S. S. “Vasna” ...	30th January 1937...	Bombay ...	..	1
2. S. S. “Varsova” ...	11th March 1937 ...	Busra ...	1	...
3. S. S. “Rahmani” ...	11th March 1937 ...	Jeddah ...	...	1
4. S. S. “Islami” ...	5th April 1937 ...	Jeddah ...	...	2
5. S. S. “Ozarda” ...	26th April 1937 ...	Bombay ...	1	...
6. H. T. “Lancashire”	5th October 1927 ...	Southampton	...	1 troops
7. S. S. “Vasna” ...	30th December 1937	Busra ...	1	...
Total ...			3	5

12 cases of chicken-pox were detected at the time of Medical Inspection of passengers prior to their embarkation on vessels sailing for ports beyond India. All these persons were prevented from embarking on vessels on which they were to sail. Those who were willing to go to the Municipal Epidemic Diseases Hospital for treatment were sent there; while the others who refused had their names and addresses communicated to the Health Officer of the Municipal Corporation.

14. *Measles*.—1. H.T. “Dorsetshire” — Arrived from Southampton on 23rd January 1937 with one case of measles. The case and the contacts were taken charge of by the Embarkation Military Authorities.

2. S.S. “Vasna”.—Arrived from Busra on 27th May 1937, with one case of measles amongst the saloon passengers.

3. H.T. “Lancashire”.—Arrived on 5th October 1937, from Southampton with two cases of measles. The cases and the contacts were taken charge of by the Embarkation Military Authorities.

4. P.S. “Rahmani”.—One case of measles (infant) amongst the pilgrims was detected at the time of Medical Inspection on 7th February 1937. The case and the contact (mother) were not permitted to embark on the pilgrim ship.

5. S.S. “Barpeta”.—On 2nd May 1937 one case of measles amongst the passengers detected at the time of Medical Inspection at the Disinfection Station. The passenger was not permitted to embark.

6. S.S. “Varsova”.—On 23rd May 1937 one case of measles amongst the passengers detected at the time of Medical Inspection at the Disinfection Station. The passenger was not permitted to embark.

7. S.S. “Vasna”.—On 6th June 1937 one case of measles amongst the passengers was detected at the time of Medical Inspection at the Disinfection Station. The passenger was detained.

15. *Acute Pneumonia*.—1. P.S. “Rahmani”.—One death from acute pneumonia occurred during the voyage from Jeddah on 10th March 1937.

2. P.S. "Rahmani".—One death from acute pneumonia occurred during the voyage from Jeddah on 12th April 1937.

16. *Scarlet Fever, Diphtheria, Mumps, Beri Beri, Yellow Fever, Sleeping Sickness, Typhoid and Cerebro-Spinal Fever.*—No cases of these diseases occurred or were reported to have occurred on any vessel entering or leaving the port during the year.

17. *Deaths due to non-notifiable diseases occurring on vessels at sea or in the harbour except pilgrim ships.*—

Serial No.	Name of vessel.	Particulars of the deceased persons.	Cause of death.	Remarks.
1	M. V. "Cedar Bank."	Chinese crew carpenter, aged 50 years.	Heart failure.	Died on 9th January 1937 at 6 p.m. at sea. Body buried at sea.
2	S. S. "Vita" ...	Female deck passenger, aged 65 years.	Bright's disease.	Died on 8th February 1937 at 6 30 a.m. Body brought on shore.
3	S. S. "Vasna" ...	Male adult deck passenger.	Anaemia.	Died on 7th February 1937 at 11-30 a.m. at sea. Body buried at sea.
4	S. S. "City of Benares."	Engine room crew coal trimmer, aged 55 years.	Heart failure.	Died on 25th February 1937 in Karachi Harbour. Body buried on shore.
5	S. S. "Vasna" ...	Female infant passenger.	Marasmus.	Died on 11th April 1937 at sea. Body buried at sea.

18. *Red Sea Pilgrim Traffic, 1936-37*—Out-ward Pilgrim Traffic.—The outward pilgrim traffic began on 19th October 1936, with the sailing of pilgrim ship "Alavi" and ended on 7th February 1937, with the departure of pilgrim ship "Akbar". During the year, 11 pilgrim ships sailed from Karachi, of these 10 arrived from Bombay and embarked additional pilgrims at this port, while one ship sailed direct from Karachi.

The following statement shows the names of the ships, the dates of their sailing and the number of pilgrims embarked on each one of them at this port :—

Serial No	Name of Ship.	Date of sailing.	Number of additional pilgrims embarked at Karachi.
1	P. S. "Alavi" ...	19th October 1936 ...	72
2	P. S. "Jehangir" ...	9th November 1936 ...	355
3	P. S. "Islami" ...	28th November 1936 ...	674
4	P. S. "Alavi" ...	13th December 1936 ...	365
5	P. S. "Rahmani" ...	2nd January 1937 ...	1,670*
6	P. S. "Akbar" ...	10th January 1937 ...	760
7	P. S. "Rizwani" ...	16th January 1937 ...	876
8	P. S. "Alavi" ...	23rd January 1937 ...	672
9	P. S. "Islami" ...	31st January 1937 ...	361
10	P. S. "Rahmani" ...	6th February 1937 ..	981
11	P. S. "Akbar" ...	7th February 1937 ...	252
Total ...			7,028

* Sailed direct from Karachi.

19. The importance of Karachi as a pilgrim port is increasing year by year and more pilgrims are going from this port than from Bombay. The following statement shows the number of pilgrims who sailed from Karachi and Bombay during the years 1932-33 to 1935-36 :—

Number of pilgrims embarked at	1932-33.	1933-34.	1934-35.	1935-36.
Karachi ...	6,440	5,483	6,792	7,028
Bombay ..	3,777	4,169	5,931	3,764

20. *B. Inward Pilgrim Ships.*—In all eight pilgrim ships arrived at Karachi with 10,252 returning pilgrims. Of these 7,467 disembarked at Karachi and the remaining continued their voyage to Bombay. The following statement gives the details of the incoming pilgrim ships.

Serial No.	Name of pilgrim ship.	Date of arrival at Karachi.	No. of pilgrims embarked at Jeddah & intermediate ports.	No. of pilgrims disembarked at intermediate ports.	No. of deaths during the voyage.	No. of cases of infectious diseases.	No. of patients in the ships hospital on arrival.	No. of pilgrims disembarked at Karachi.	No. of pilgrims bound for Bombay.
1	P. S. "Rahmani"	11th March 1937.	1,656	...	3	...	4	1,653	...
2	P. S. "Akbar"	13th March 1937.	1,393	...	3	...	4	1,390	...
3	P. S. "Rizwani"	17th March 1937.	1,632	622	3	...	3	795	212
4	P. S. "Alavi" ...	3rd April 1937 ...	1,039	23	6	...	6	678	332
5	P. S. "Islami" ...	5th April 1937 ...	1,637	...	...	...	2	1,010	627
6	P. S. "Rahmani"	14th April 1937...	1,695	120	3	...	14	822	750
7	P. S. "Jehangir"	26th April 1937...	1,038	...	5	...	4	595	438
8	P. S. "Alavi"	11th May 1937 ...	1,062	120	4	...	9	524	426*
Total ...			11,152	885	27	...	46	7,467	2,785

* Includes 12 pilgrims embarked at Karachi for Aden.

The total number of deaths during voyage on in-coming pilgrim ships was 27, all from non-infectious diseases, thus giving the death rate of 0.24 per cent.

21. *Deratisation and Deratisation Exemption Certificates.*—The following ships were granted Deratisation Certificates under Article 28 of the International Sanitary Convention, 1926 :—

1. S.S. "Invella" 5-11-1937.

2. S.S. "Haideri" 20-12-1937.

The following ships were granted Deratisation Exemption Certificates :—

Serial No.	Name of pilgrim ship.	Date of arrival at Karachi.
1	S. S. "Euphorbia"	29th May 1937.
2	S. S. "City of Bedford"	1st June 1937.
3	S. S. "Gazana"	4th June 1937.
4	S. S. "Sirsa"	11th June 1937.
5	S. S. "Jalarajan"	7th June 1937.
6	S. S. "Lacklan"	3rd November 1937.
7	S. S. "Nagina"	21st November 1937.
8	S. S. "Jalamani"	1st December 1937.

22. *Inspection of crew's stores and provisions as required under section 91 of the Indian Merchant Shipping Act, 1923.*—During the year under report, provisions and stores for the use of the Asiatic crew of 42 ships were inspected. 94 samples of ghee were sent to the Chemico-Bacteriological Laboratory, Karachi, out of which 14 were pronounced as not genuine and unfit for human consumption.

23. *Medical Advice by Wireless.*—Following ships applied for medical advice by wireless which was promptly complied with.

Serial No.	Name of pilgrim ship.	Date of arrival at Karachi.
1	S. S. "City of Agra"	On 18th August 1937 at 2.05 p.m.
	Do. do.	On 19th August 1937 at 1.35 p.m.
	Do. do.	On 19th August 1937 at 3.20 p.m.
2	S. S. "Akti" through S. S. "Steel Seafarer"	On 8th October 1937 at 1.30 p.m.
	Do. do.	On 9th October 1937 at 12.30 p.m.

24. *Anti-Rat Campaign.*—Anti-rat campaign was carried out throughout the year under the supervision of the Port Health Officer

on behalf of the Karachi Port Trust on the wharves and jetties. For this purpose the Karachi Port Trust maintained at their own cost one qualified Sanitary Sub-Inspector and seven coolies.

The average number of rats trapped per day for 150 traps set, was 4.53. The total number of live rats trapped during the year was 1,655, in addition to this, 430 rats were killed by poison baits.

Throughout the year rats were sent twice a week to the Government Chemico-Bacteriological Laboratory for bacteriological examination. Of the batch of rats sent for examination on 24th April 1937, one rat was declared by the examining officer at the laboratory as infected with plague.

25. *Anti-Mosquito Campaign.*—The Karachi Port Trust appointed following staff for the purposes of carrying out anti-mosquito operations. This establishment worked under the supervision of the Port Health Officer, Karachi.

1 Medical Officer trained at Malaria class, at Karnal, in anti-mosquito measures.

1 Qualified Sanitary Inspector.

5 Coolies.

STATEMENT OF WORK CARRIED OUT.

		Number inspected	Number breeding.		
			Stegomyia.	Anophe-line.	Culex.
Place inspected	Sea-going Country Craft ...	3,642	1,033	1	1
	Fishing Craft ...	2,333	305	...	3
	Lighters, Launches, and other harbour crafts.	7,470	1	...	...
	West Wharf Area ...	1,498	22	6	3
	East Wharf Area ...	3,685	34	3	18
	Mansfield Yard Area ...	1,300	15	4	8
	Thole Produce Yard Area ...	4,410	38	17	40
Total ...		24,338	1,448	31	73

26. *Marine Airport Duties.*—With the commencement of the “ Empire Flying Boat ” Service of the Imperial Airways Ltd., the Port Health Officer was entrusted with the quarantine and Sanitary duties in connection therewith by Government of India, according to their orders conveyed in the Department of Education, Health and Lands, letter No. F. 13-22/36-G., dated 28th October 1936.

The Marine Airport is fully equipped from the Port Health point of view, excepting a suitable quarantine Anchorage for Yellow Fever infected or suspected Flying Boats, half a mile away from ships or shore. In the Administrative building at the Marine Airport, an efficient mosquito-proof isolation room has been reserved for effective temporary isolation of Yellow Fever cases or suspects pending their removal to the Yellow Fever Isolation Hospital at Drigh Road.

All persons arriving by in-coming “ Flying Boats ” from the west, were medically examined and careful investigation was made, to detect whether any person attempted to enter British India through the Marine Airport of Karachi in contravention of Government of India, Department of Education, Health and Lands Notification, No. F. 13/11/35-G., dated the 16th September 1936, relating to persons arriving from Yellow Fever infected or suspected areas and it was found that no passenger attempted to do so and the Imperial Airways Ltd. strictly complied with the Government of India rules on the subject in respect of their Flying Boats and their officers and crew.

From 29th July to 31st December 1937, Bills of Health were granted to 17 West Bound Flying Boats. The following statement gives the details of the number of Flying Boats, passengers, and crew inspected during the above mentioned period.

	Number of flying Boats.	Crew.	Passengers.
In-coming	19	114	111
Out-going	17	100	86
Total ...	36	214	197

27. *Sanitary Condition of the Harbour.*—The sanitary condition of the harbour during the year was satisfactory.

28. *Miscellaneous*.—One steamer bound for Kathiawar, one for Colombo and six for Marmagoa were granted Necrological Certificates at the request of their Commanders through their Stevedores.

Certificates were granted to the Harbour Police for the removal of two corpses, one from the s.s. "Vita" on 8th February 1937 and one from the pilgrim ship "Alavi" on 11th May 1937.

29. *Staff*.—Dr. B. F. Khambatta, M.B.B.S., D.P.H., was in-charge of the Port Health Department throughout the year under report. The whole staff—Medical, Clerical, Launch, Disinfection and Peons—performed their duties faithfully and with great zeal, thus maintaining the usual high standard of efficiency.

CHAPTER XV.

GENERAL REMARKS.

1. *Nutrition*.—No officer of the Public Health Department was deputed during the year to attend a course of instruction at Coonoor arranged by the Government of India in connection with training in nutrition survey work.

2. *Stegomyia Mosquito Control in Major Sea Ports of India*.—As a result of the decision arrived at the “ *Stegomyia Index* ” Conference held on 26th October 1936, the various local authorities have taken the following actions in their areas to control and prevent the breeding of *stegomyia* mosquitoes.

(i) *Karachi Port Trust*.—One Medical Officer, 1 Sanitary Inspector and 5 coolies have been appointed to carry out anti-mosquito operations in the Harbour and Port Trust area. The whole area is divided into six parts ; and each part is inspected weekly. Country crafts are inspected daily. This staff works under the supervision of the Health Officer of Port, Karachi.

(ii) *Karachi Municipal Corporation*.—The Corporation sanctioned the entertainment of one munshi and three coolies to undertake anti-mosquito measures in the islands of Baba, Bhit, Bunker and Shamspar.

(iii) *District Local Board, Karachi*.—The Board sanctioned a sum of Rs. 360 as contribution for the purpose of carrying out the work in connection with the *stegomyia* mosquito control in the area around the City of Karachi under the control of the District Local Board, Karachi. The work is to be carried out by the Air Port Health Officer with the approval of the Public Health Commissioner with the Government of India.

(iv) North Western Railway

(v) Karachi Cantonment Area ; and

(vi) Air Port area.

The anti-*stegomyia* operations are carried out with the existing staff.

A monthly statement of *stegomyia* index is sent by all local bodies mentioned above to this office which is consolidated and submitted to the Public Health Commissioner with the Government of India.

3. *Public Health Act*.—There is no Public Health Act, but a vital need for such an Act is keenly felt for the Province of Sind defining the obligatory duties of each Local Body in general matters of sanitation and also the action which shall be taken by the Public Health Department on the failure on the part of the Local Body to comply with its statutory duty. The application of the various provisions of the Act should not be left to the option of the Local Authority but should be made compulsory.

The Public Health Act will co-ordinate the main requirements of the Province and lay down a policy which, whatever the present day financial condition may be, can well be carried out in toto in years to come.

4. *Public Health Essays*.—No remarks.

5. *Personal proceedings and office*.—The following table shows the various officers who held appointments in the Public Health Department during the year under review :—

Appointment.	Name.	Period.	Remarks.
Director of Health and Prison Services, Sind.	Lieut.-Col. N. Briggs M.R.C.S., L. R. C. P., (Lond.). D. P. H., I. M. S.,	1st January 1937 to 31st Dec. 1937.	
Assistant Director of Public Health, Sind.	Capt. E. Benjamin, M.B., B.S., (Bom.), D.P.H., D.T.M., & H., (Lond.).	1st January 1937 to 14th Nov. 1937.	
Assistant Director of Public Health, Sind.	Mr. O. M Akbani, M.B., B.S. (Bom.) D.P.H., (Lond.).	15th Nov. 1937 to 31st Dec. 1937.	Officiating in addition to his own duties.
Officer-in-charge Chemico-Bacteriological Laboratory, Karachi.	Mr. H. C. Hiranandani.	1st January 1937 to 31st March 1937.	Do
Officer-in-charge Chemico-Bacteriological Laboratory, Karachi.	Mr. O. M. Akbani, M.B., B.S., (Bom.) D.P.H., (Lond.).	1st April 1937 to 31st Dec. 1937.	

The Director of Health and Prison Services, Sind, inspected the sanitation of 6 towns (Shikarpur, Tando Adam, Tatta, Jacobabad, Dadu and Larkana). Sanitary defects were pointed out to the Local Authorities concerned and advice given. He visited plague affected quarters in Karachi City.

The Board of Public Health Works.—The Board of Public Health Works for Sind was constituted under Government of Sind Resolution, General Department, No. 181-G.B., dated 30th April 1936.

The following schemes in connection with Public Health Works in Sind were approved administratively by the Board of Public Health Works, Sind, in the year 1937 and technically sanctioned by the Consulting Public Health Engineer to the Government of Sind :—

1. Improvements to Karachi Water Supply.
2. Jacobabad drainage and improvements to water supply.

During the year under review, the Assistant Director of Public Health inspected the sanitary condition of 10 municipal towns, 1 Notified Area Committee village, and 5 sanitary committee villages. The vaccination work in these towns was also inspected. During his tour, he inspected 9 schools; 1 police line, 9 dispensaries, and 5 factories. 30 site plans of schools and 5 of school playgrounds were approved of, and opinion given on 29 samples of water sent by various agencies and examined at the Chemico-Bacteriological Laboratory, Karachi. During the outbreak of plague in Karachi City, he visited the infected areas, visited the Epidemic Diseases Hospital to see the patients, and the Chemico-Bacteriological Laboratory, in connection with the examination of plague material from patients. He conducted a class for touring medical officers and identified 597 mosquitoes sent by these officers. He attended the meetings of the Red Cross Society, Karachi Board of Health and Karachi Sanitary Board. He gave lectures and demonstrations in Hygiene to senior medical students of the Hyderabad Medical School. He inspected 516 children for vaccination purposes.

The Inspectors of Sanitation and Vaccination gave lectures on tuberculosis in schools. They were deputed to look after the sanitation of important fairs. They inspected the vaccinal condition of school children. During their tours they visited 1,322 villages for inspection of vaccination work and examined 19,438 children for primary vaccination and 5,423 for re-vaccination. They also visited villages for sanitary inspection.

Staff.—In spite of the increase in work the office staff worked satisfactorily and efficiently. The staff of the Chemico-Bacteriological Laboratory also worked satisfactorily.

B. Z. SHAH,

Lieut.-Col., I. M. S.,

Director of Health and Prison Services,

Karachi, 30th July 1938.

Sind, Karachi.

APPENDIX

Table showing Health Services in Rural and Urban

Districts.			Rural areas.							
			Medical Officers of Health.				Epidemic staff.	Sanitary and Health Ins- pectors.	Vaccinators.	
			Holding D. P. H.		Licentiates L. P. H. S.				Male.	Female.
			Whole time.	Part time.	Whole time.	Part time.				
1			2	3	4	5	6	7	8	9
Karachi	9	...
Dadu	8	...
Hyderabad	11	...
Nawabshah	10	...
Thar Parkar	13	...
Larkana	1 Holding M.B., B.S., degree.	...	...	1	9	1
Sukkur	9	...
Upper Sind Frontier	6	...
Total	1	...	...	1	75	1

I.

areas in the Province of Sind during 1937.

		Urban areas.									
School Medical Officers.	Other Health staff.	Medical Officers of Health.				Sanitary and Health Ins- pectors.	Vaccinators.		Ins- pectors of Vacci- nation.	School Medical Officers.	Other Health staff.
		Holding D. P. H.		Licentiates L. P. H. S.			Male.	Female.			
		Whole time.	Part time.	Whole time.	Part time.						
10	11	12	13	14	15	16	17	18	19	20	21
...	...	3	...	...	...	8	4	2	...	...	...
...
...	...	1	...	...	...	4	1	...	1 (Superintendent of Vaccination).	...	...
...	1	...	...	...	...	...
...
...	1	1	...	...	...	...
...	...	2	...	...	...	7	3	...	...	...	...
...	1	1	...	...	...	...
...	...	6	...	...	...	22	10	2	1	...	...

APPENDIX A.

Table showing maternity and child welfare centres, health visitors, and mid-wives in rural and urban areas in the Province of Sind during 1937.

District.	Maternity and Child Welfare Centres maintained by—						Trained visitors.		Trained mid-wives.		Trained dais.	
	Govern- ment.		Local and Municipal Bodies.		Other agencies.							
	Rural.	Urban.	Rural.	Urban.	Rural.	Urban.	Rural.	Urban.	Rural.	Urban.	Rural.	Urban.
Karachi	1	6	...	1	...	4	8	6	1	7
Dadu	4	1	1	...	...	...	1	1	4	...
Hyderabad	1	...	...	...	1	...	1	1	4
Nawabshah	2	4	1
Thar Parkar	4
Larkana	11	1	...	3	1	...	2	...	18	...
Sukkur	1	2	3	3	...	1	4	12	1	27
Upper Sind Frontier...	1	...	1	2	...	...	2	2	...	...
Total	18	11	5	9	1	6	17	24	29	

APPENDIX II.

*Statement shewing the annual Income and Expenditure of Institutions under the Public Health Department,
Sind, during the year 1937-38.*

No.	Name of Institute.	Income.					Expenditure.							
		Sale proceeds of Sera Vaccines, quinine and Malaria Posters, etc.	Contributions.	Miscellaneous.	Recovery of over payments.	Collection of fees for services rendered.	Total.	Pay of officers.	Pay of Establishment including menials.	Allowances.	Contingencies.	Grants-in-aid and passage contribution to the Govt. of Punjab.	Other charges including expenditure on Medical officers appointed on Malaria and Vaccination duties and Quinine, etc.	Total.
1	Director and Assistant Director, Public Health.	9,672	..	114	185-15	..	9,971-15	{ 9,368 7,112 }	{ 21,055 }	454 6,332	{ 4,091 }	{ 822 14,728 }	{ 35,9 }	10,644 Non-Voted. 89,286 Voted,
2	Chemico-Bacteriological Laboratory.	...	5,263	1,615	...	6,528	13,406	5,280	9,973	1,276	4,982	...	...	21,511 Voted.
3	Local Vaccination Establishment.	...	29,246	...	...	...	29,246	...	31,462	10,467	...	5,640	..	47,569 Voted.
	Total ...	9,672	34,509	1,729	185-15	6,528	52,623-15	{ 9,368 12,392 }	{ 62,490 }	454 18,075	{ 9,073 }	{ 822 20,368 }	{ 35,968 }	10,644 Non-Voted. 1,58,366 Voted.

APPENDIX

FORM NO. I.—*Annual Statement showing the Births registered*

1	2	3			4		
No.	Districts and Towns of Rural Circles.	Population according to Census of 1931.			Number of Births registered.		
		Male.	Female.	Total.	Male.	Female.	Total.
1	Karachi ...	3,28,679	2,50,753	5,79,432	9,409	8,393	17,802
2	Hyderabad ...	3,71,097	2,90,679	6,61,776	5,613	4,346	9,959
3	Nawabshah ...	2,79,032	2,17,580	4,96,612	4,382	3,074	7,456
4	Thar Parkar ...	2,61,945	2,06,095	4,68,040	4,071	3,179	7,250
5	Larkana ...	2,50,178	2,01,963	4,52,141	6,066	4,733	10,799
6	Dadu ...	1,87,071	1,47,211	3,34,282	3,253	2,547	5,800
7	Sukkur ...	3,49,312	2,74,467	6,23,779	8,053	6,403	14,456
8	Upper Sind Frontier ...	1,45,588	1,14,738	2,60,326	2,251	1,616	3,867
9	Town Circles ...	3,97,057	2,89,800	6,86,857	14,274	12,689	26,963
10	Rural Circles ...	17,75,845	14,13,686	31,89,531	28,824	21,602	50,426
11	Grand total of the Province.	21,72,902	17,03,486	38,76,388	43,098	34,291	77,389

ANNUAL FORM NO. I. *Statement showing still-births according*

Serial No.	Name of Districts.	Muhammadans		Hindus.		Jains.	
		Male.	Female.	Male.	Female.	Male.	Female.
1	Karachi ...	96	86	126	125	...	...
2	Hyderabad ...	20	26	74	71	1	...
3	Nawabshah ...	7	4	3	7	...	...
4	Thar Parkar ...	3	2	4	2	...	...
5	Larkana ...	25	19	33	13	...	...
6	Dadu ...	5	8	7	1	...	...
7	Sukkur ...	18	11	123	79	...	...
8	Upper Sind Frontier ...	3	...	...	2	...	...
	Sind total ...	177	156	375	300	1	...

III.

in the Districts of the Province of Sind during 1937.

5			6		
Ratio of Births per 1,000 of Population.			Mean Ratio of Births per 1,000 during previous five years.		
Male.	Female.	Total.	Male.	Female.	Total.
16.41	14.47	30.88	14.94	13.46	28.40
8.48	6.57	15.05	8.26	6.30	14.56
8.82	6.19	15.01	10.68	7.90	18.58
8.69	6.79	15.48	10.5	8.17	18.74
13.41	10.25	23.66	11.54	8.91	20.45
9.73	7.62	17.35	10.23	7.56	17.79
12.91	10.26	23.17	12.97	10.47	23.44
8.65	6.27	14.92	9.04	6.57	15.61
20.78	18.47	39.26	19.58	17.71	37.29
9.04	6.77	15.81	9.52	7.12	16.64
11.12	8.85	19.96	11.21	8.90	20.11

to caste in the Province of Sind for the year 1937.

Christians.		Parsis.		Other Classes.		Total.			Percentage Ratio to Live births.
Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Total.	
7	2	...	...	...	1	229	214	443	2.49
...	...	...	...	...	...	95	97	192	1.93
...	...	...	...	...	...	10	11	21	0.28
...	...	...	...	...	...	7	4	11	0.15
...	...	...	...	...	...	63	32	95	0.88
...	...	...	...	...	...	12	9	21	0.36
...	...	...	...	...	...	141	90	231	1.60
...	...	...	...	...	...	3	2	5	0.13
7	2	...	...	...	1	560	459	1,019	1.32

ANNUAL FORM

Annual statement showing the Births and Deaths registered in the

1 Serial Number.	2 Districts,						3 Area in square miles.	4 Average population per square mile.	5 Number of deaths registered.			
									Male.	Female.	Total	
1	Karachi	...	...	...	...	R. C.	...	1,615	23	172	141	313
2	Tatta	...	...	...	...	"	...	1,318	46	206	158	364
3	Mirpur Sakro	...	...	...	...	"	...	1,138	30	149	124	273
4	Ghorabari	...	...	...	...	"	...	339	69	135	96	231
5	Keti Bunder	...	...	...	...	"	...	213	63	42	35	77
6	Mirpur Bathoro...	...	...	...	...	"	...	272	158	265	198	463
7	Sujawal	...	...	...	...	"	...	269	14	281	196	477
8	Jati ...	...	...	...	...	"	...	1,475	23	154	103	257
9	Shah Bandar	...	...	...	...	"	...	1,388	29	247	191	438
10	Karachi	...	...	...	...	T. C.	...	62	4,098	3,394	2,782	6,176
11	Karachi	...	...	...	...	C. C.	...			59	44	103
12	Drigh Road	...	...	...	...	"	...			3	2	5
13	Tatta	...	...	...	...	T. C	...			74	54	128
14	Keti Bunder	...	...	...	...	"	...	...	...	17	12	29
Karachi District Total								8,089	72	5,198	4,136	9,334
15	Hyderabad	...	...	...	...	R. C.	...	366	212	382	239	621
16	Guni ...	...	...	...	...	"	...	987	106	401	317	718
17	Tando Bago	...	...	...	...	"	...	650	105	294	192	486
18	Badin	...	...	...	...	"	...	792	113	311	275	586
19	Tando Allahyar	...	...	...	...	"	...	595	103	381	260	641
20	Hala ...	...	...	...	...	"	...	511	222	559	349	908
21	Dero Mahbat	...	...	...	...	"	...	498	94	322	222	544
22	Hyderabad	...	...	...	...	T. C.	...	18	5,334	598	1,167	2,765
23	Hyderabad	...	...	...	...	C. C.	...			17	13	30
24	Hala	...	...	...	...	T. C.	...			47	21	68
25	Matari	...	...	...	...	"	...			47	38	85
26	Tando Muhammadkhan	...	...	...	...	"	...	...	...	47	43	90
27	Nasarpur	...	...	...	...	"	...	...	...	40	25	65
28	Tando Allahyar...	...	...	...	...	"	...	...	...	39	47	86
Hyderabad District Total								4,417	150	4,485	3,208	7,693

No. II.

Districts of the Province of Sind during the year 1937.

6											7		
Deaths per 1,000 of population from											Mean ratio of deaths per 1,000 during previous five years.		
Cholera.	Small-pox.	Plague.	Fevers.	Dysentery and Diarrhoea.	Respiratory diseases.	Injuries.	All other causes.	All causes.			Male.	Female.	Total.
								Male.	Female.	Total.			
...	·05	...	5·66	·03	1·73	·05	1·36	9·24	8·49	8·88	10·59	10·40	10·51
...	·19	...	3·91	...	2·42	·12	·51	7·15	7·15	7·15	6·77	6·20	6·52
...	·03	·03	2·74	·09	3·14	·14	1·78	7·94	7·36	7·95	10·49	9·75	10·16
...	...	...	3·28	...	5·32	·25	·61	9·94	8·87	9·46	10·22	11·00	10·57
...	...	...	1·81	...	3·69	·16	·80	6·61	6·30	6·46	9·61	8·46	9·07
...	·02	...	6·73	·02	3·36	·21	·47	11·05	10·47	10·81	11·42	11·73	11·32
...	...	...	3·61	·05	7·78	·21	·92	13·17	11·65	12·57	11·37	10·94	11·17
...	...	...	3·72	...	2·94	·20	·55	8·01	6·67	7·41	12·59	12·63	12·61
...	...	...	7·74	·10	1·78	·38	·98	11·12	10·71	10·98	12·83	12·45	12·63
...	·20	·05	·79	2·63	10·87	·41	9·98	23·39	27·07	24·93	23·02	27·82	25·01
...	...	·16	5·12	1·14	2·08	·32	7·84	15·92	17·36	16·66	17·26	18·16	17·47
...	...	...	2·50	...	...	...	...	2·14	3·31	2·50	shown as separate registration circle from 1937.		
...	1·76	...	5·08	·21	4·05	...	2·18	14·47	11·94	13·28			
...	...	..	7·11	2·40	4·80	·60	2·61	19·18	15·60	17·52	22·57	20·81	21·75
...	·13	·03	3·02	1·16	6·61	·29	4·87	15·81	15·81	16·11	16·23	17·62	16·83
...	·01	...	4·99	·08	1·99	·19	·71	8·78	6·94	7·97	10·92	10·66	10·80
...	·01	...	4·44	·04	2·12	·14	·58	7·28	7·40	7·33	8·68	8·03	8·40
...	·10	...	4·92	·02	1·60	·12	·39	7·65	6·50	7·15	8·40	7·71	8·09
...	...	...	4·11	·02	1·70	·10	·63	6·11	7·00	6·56	8·75	7·85	8·13
...	...	...	9·78	·02	1·93	·10	·46	13·14	11·34	12·34	13·10	12·21	13·04
...	...	...	6·11	·04	2·20	·19	·58	9·88	8·13	9·12	10·69	10·80	10·74
...	·15	...	8·36	...	2·36	·13	·66	12·54	10·59	11·66	12·31	11·12	11·77
...	·03	...	4·60	1·25	9·57	·51	12·84	29·95	27·34	28·80	} 25·70		26·11
...	...	...	3·09	...	1·11	...	2·42	6·14	7·38	6·62			
...	...	...	6·02	...	1·92	·14	1·23	11·65	6·26	9·31	9·88	10·13	9·99
...	...	...	5·22	...	3·73	30	3·45	11·96	13·72	12·70	15·01	18·10	16·29
...	...	...	5·89	·45	4·83	·30	2·11	12·81	14·54	13·58	15·26	17·58	16·60
...	...	...	6·82	·23	6·58	·23	1·42	17·69	12·54	15·28	19·02	21·07	19·98
...	...	...	7·79	·19	2·52	·58	5·63	14·17	19·03	16·71	12·72	12·95	12·83
...	·03	...	5·55	·21	3·16	·20	2·47	12·09	11·04	11·62	12·56	12·30	12·44

ANNUAL FORM

1 Serial number.	2 Districts.						3 Area in square miles.	4 Average population per square mile.	5 Number of deaths registered.			
									Male.	Female.	Total.	
29	Shahdadpur	...	...	...	...	R. C.	...	561	184	559	390	949
30	Kandiaro	...	...	...	...	,,	...	404	200	401	347	748
31	Naushahro Feroze	...	...	...	...	,,	...	492	175	502	361	863
32	Moro	...	...	...	...	,,	...	483	124	348	249	597
33	Sakrand	...	...	...	...	,,	...	506	124	229	120	349
34	Nawabshah	...	...	...	...	,,	...	967	58	254	170	424
35	Sinjhoro	...	...	...	...	,,	...	475	161	311	247	558
36	Tando Adam	...	...	...	...	T. C.	...	...	...	95	69	164
37	Nawabshah	...	...	...	...	,,	...	...	...	53	44	97
38	Shahdadpur	...	...	...	...	,,	...	...	...	36	52	88
	Nawabshah District Total						...	3,888	128	2,788	2,049	4,837
39	Umarkote	...	...	...	...	R. C.	...	1,459	30	251	221	472
40	Jamesabad	...	...	...	...	,,	...	505	61	255	188	443
41	Chachro	...	...	...	...	,,	...	2,797	22	557	413	970
42	Nagar Parkar	...	...	...	...	,,	...	1,618	26	326	268	594
43	Diplo	...	...	...	...	,,	...	1,503	16	142	124	266
44	Mithi	...	...	...	...	,,	...	1,562	29	422	293	715
45	Khipro	...	...	...	...	,,	...	2,251	23	221	120	341
46	Sanghar	...	...	...	...	,,	...	818	41	226	138	364
47	Mirpurkhas	...	...	...	...	,,	...	415	115	263	137	400
48	Samaro	...	...	...	...	,,	...	483	91	326	189	515
49	Digri	...	...	...	...	,,	...	225	191	319	197	516
50	Umarkote	...	...	...	...	T. C.	...	...	...	27	39	66
51	Mirpurkhas	...	...	...	...	,,	...	...	...	139	59	198
	Thar Parkar District Total						...	13,636	34	3,474	2,386	5,860
52	Larkana	...	...	...	...	R. C.	...	217	329	466	332	798
53	Warah	...	...	...	...	,,	...	380	148	278	289	567
54	Dokri	...	...	...	...	,,	...	326	235	428	347	775
55	Kambar	...	...	...	...	,,	...	473	173	412	302	714
56	Mirokhan	...	...	...	...	,,	...	288	164	291	230	521
57	Ratodero	...	...	...	...	,,	...	214	241	357	338	695
58	Shahdadkot	...	...	...	...	,,	...	577	58	174	150	324
59	Larkana	...	...	...	...	T. C.	...	2	13,420	294	263	557
60	Kambar	...	...	...	...	,,	...	...	...	58	50	108
61	Ratodero	...	...	...	...	,,	...	...	...	74	90	164
	Larkana District Total						...	2,477	150	2,832	2,391	5,223

No. II—*contd.*

6											7		
Deaths per 1,000 of population from											Mean ratio of deaths per 1,000 during previous five years,		
Cholera.	Small-pox.	Plague.	Fevers.	Dysentery and Diarrhoea.	Respiratory diseases.	Injuries.	All other causes.	All causes			Male.	Female.	Total.
								Male.	Female.	Total.			
...	...	...	8·13	·07	2·66	·19	·68	12·22	11·07	11·73	12·01	11·37	11·73
...	·19	...	7·58	·06	·70	·19	·54	9·06	9·48	9·26	11·96	12·08	12·02
...	·17	...	8·06	·04	·83	·23	·69	10·60	9·40	10·02	10·56	10·30	10·45
...	·15	...	7·79	·03	1·06	·25	·74	10·58	9·36	10·02	10·05	9·75	9·92
...	·01	...	4·78	·05	·46	·06	·22	6·39	4·49	5·58	8·50	7·94	8·26
...	·10	...	7·69	·02	·47	·23	·10	8·95	8·15	8·61	9·87	8·97	9·52
...	...	...	8·94	·02	1·84	·17	·60	11·36	11·83	11·57	14·55	13·24	13·98
·07	...	...	4·14	·44	3·61	·29	4·21	12·51	11·76	12·16	16·85	18·74	17·67
...	...	...	8·97	...	2·99	...	1·85	12·22	16·37	13·81	5·54	7·07	6·12
...	...	...	6·01	...	1·91	·22	1·80	6·96	14·13	9·94	9·09	11·14	10·06
·002	·09	...	7·45	·06	1·26	·20	·68	9·99	9·41	9·74	11·09	10·78	10·95
...	...	...	9·08	·17	2·02	·07	·57	11·26	12·74	11·91	13·51	13·09	12·85
..	...	...	9·59	·03	3·38	·09	1·31	14·84	13·87	14·40	15·82	15·93	15·87
...	·53	...	12·02	·40	1·80	·10	·80	16·76	14·35	15·65	13·06	10·61	11·92
...	·28	...	10·16	·17	2·61	·19	·80	14·57	13·85	14·21	12·19	11·12	11·51
...	...	...	7·64	·08	1·58	·14	1·10	10·33	10·79	10·54	17·68	16·44	17·11
...	·16	...	11·93	·11	2·12	·27	1·05	17·31	13·73	15·64	14·57	14·24	14·42
...	...	...	4·92	...	1·02	·20	·55	7·46	5·60	6·69	11·32	12·22	10·85
...	...	...	6·22	·09	3·55	·18	·73	11·29	10·02	10·77	11·09	11·11	11·20
...	...	...	5·89	...	3·69	·16	·96	12·37	8·52	10·70	15·05	14·60	14·85
...	...	...	7·63	·02	2·71	·18	1·22	12·92	10·19	11·76	10·86	10·35	10·64
...	...	...	6·87	·14	3·69	·32	·95	13·19	10·43	11·97	18·03	12·27	17·67
...	...	...	12·49	...	3·15	...	1·55	13·19	21·74	17·19	24·91	25·08	24·99
...	...	...	4·82	·20	11·00	·49	2·95	21·65	15·69	19·46	12·46	13·84	12·96
...	·11	...	8·45	·13	2·69	·19	·95	13·28	11·58	12·52	13·77	13·00	13·42
...	·48	...	9·72	...	·28	·19	·52	11·82	10·42	11·19	13·24	13·34	13·28
...	·39	...	8·25	...	·59	·29	·66	9·05	11·38	10·18	11·04	10·91	10·98
...	·57	...	8·23	·01	·35	·15	·79	10·19	10·32	10·10	12·66	11·80	12·27
...	·32	...	8·72	...	·19	·32	·36	10·38	9·34	9·91	10·81	11·66	11·19
...	·04	...	10·25	...	·15	·25	·34	11·07	10·93	11·03	12·42	13·79	13·02
...	1·41	...	10·77	·08	·13	·31	·72	12·68	14·31	13·42	14·45	14·23	14·25
...	·36	...	8·48	·03	·12	·45	·27	9·37	10·14	9·71	11·07	10·48	11·09
...	·41	...	7·90	·26	3·21	·18	8·79	18·79	23·49	20·75	17·96	21·69	19·52
...	...	...	9·26	...	·71	·52	·62	10·54	11·85	11·11	13·09	15·89	14·30
...	1·93	...	19·75	·14	...	·14	·55	18·78	27·33	22·51	19·04	20·95	19·90
...	·53	...	9·24	·03	·44	·26	1·05	11·32	11·84	11·55	12·79	13·05	12·91

ANNUAL FORM

1 Serial number.	2 Districts.							3 Area in square miles.	4 Average population per square mile.	5 Number of deaths registered.		
										Male.	Female.	Total.
62	Kotri	...	...	...	...	R. C.	...	1,496	22	240	200	440
63	Kohistan	...	...	...	...	"	...	1,806	9	72	80	152
64	Sehwan	...	...	...	...	"	...	1,273	35	320	231	551
65	Johi ...	...	...	...	...	"	...	755	68	297	239	536
66	Dadu	...	...	...	...	"	...	297	194	223	155	378
67	Kakar	...	...	...	...	"	...	448	108	179	181	360
68	Mehar	...	...	...	...	"	...	364	...	304	235	539
69	Kotri	...	...	...	...	T. C.	...	...	...	63	40	103
70	Sehwan	...	...	...	...	"	...	...	...	29	14	43
71	Dadu	...	...	...	...	"	...	...	...	28	26	54
72	Manjhand	...	...	...	...	"	...	...	...	25	19	44
	Dadu District Total							6,439	51	1,780	1,420	3,200
73	Sukkur	...	...	...	...	R. C.	...	267	248	543	463	1,011
74	Shikarpur	...	...	...	...	"	...	498	147	536	448	984
75	Rohri	...	...	...	...	"	...	1,629	48	307	193	500
76	Garhi Yasin	...	...	...	...	"	...	402	171	451	429	880
77	Ghotki	...	...	...	...	"	...	341	137	233	215	448
78	Pano Akil	...	...	...	...	"	...	393	120	338	233	571
79	Mirpur Mathelo	...	...	...	...	"	...	1,604	30	276	181	457
80	Ubauro	...	...	...	...	"	...	462	100	320	267	587
81	Sukkur	...	...	...	...	T. C.	...	3	23,092	561	453	1,014
82	Shikarpur	...	...	...	...	"	...	9	6,745	730	725	1,455
83	Rohri	...	...	...	...	"	...	...	...	100	59	159
84	Garhi Yasin	...	...	...	...	"	...	...	...	85	81	166
85	Ghotki	...	...	...	...	"	...	...	...	91	96	187
	Sukkur District Total							5,608	111	4,571	3,848	8,419
86	Jacobabad	...	...	...	...	R. C.	...	254	157	203	116	319
87	Garhi Khairo	...	...	...	...	"	...	273	135	204	197	401
88	Kandhkot	...	...	...	...	"	...	542	119	260	171	431
89	Thul...	...	...	...	...	"	...	497	63	357	310	667
90	Kashmor	...	...	...	...	"	...	543	76	215	128	343
91	Jacobabad	...	...	...	...	T. C.	...	...	...	75	58	133
	Upper Sind Frontier District Total							2,109	123	1,314	980	2,294
	Total of all Town circles							94	265	7,945	6,485	14,430
	Total of all Rural circles							46,569	69	18,497	13,933	32,430
	Total of the Province							46,663	83	26,442	20,418	46,860

No. II—concl'd.

6											7		
Deaths per 1,000 of population from											Mean ratio of deaths per 1,000 during previous five years.		
Cholera.	Small-pox.	Plague.	Fevers.	Dysentery and Diarrhoea.	Respiratory diseases.	Injuries.	All other causes.	All causes.			Male.	Female.	Total.
								Male.	Female.	Total.			
...	06	...	10.80	10	1.48	16	1.54	14.19	14.03	14.14	14.72	13.80	14.30
...	...	...	4.32	17	2.19	06	2.01	7.71	9.95	8.75	7.17	6.84	17.02
...	23	...	8.91	05	2.62	15	2.06	14.59	13.31	14.02	15.09	15.10	15.09
...	02	...	8.88	04	55	25	68	10.48	10.34	10.42	11.37	10.47	10.96
...	51	...	6.19	...	43	12	16	7.54	7.23	7.41	10.59	11.16	10.83
...	20	...	6.54	06	11	19	33	6.70	8.32	7.43	11.72	10.66	11.25
...	23	...	6.41	03	20	18	55	7.65	7.64	7.65	10.16	11.13	10.56
...	...	...	5.08	70	2.89	...	1.60	10.16	10.44	10.27	9.67	12.01	10.56
...	...	...	3.62	...	1.56	...	2.24	8.24	6.15	7.42	7.11	10.10	8.28
...	15	...	4.88	...	76	...	2.44	8.17	8.30	8.23	7.29	7.02	7.16
...	...	...	9.83	36	1.82	...	3.65	17.93	14.05	16.02	17.97	17.01	17.48
...	21	...	7.28	07	91	15	95	9.52	9.65	9.57	11.35	11.38	11.36
...	06	...	13.13	08	48	09	1.40	14.81	15.76	15.24	16.78	18.42	17.51
01	42	...	12.19	02	14	14	48	13.26	13.58	13.40	12.44	13.31	12.71
...	24	...	5.59	01	28	08	22	7.04	5.68	6.42	7.12	7.23	7.16
...	73	...	12.25	...	25	12	1.01	13.45	15.44	14.36	17.60	18.50	18.01
...	31	...	9.28	05	31	21	50	10.03	11.44	10.66	17.91	17.35	17.66
...	59	...	10.51	...	44	23	30	12.95	11.00	12.07	12.99	13.27	13.11
...	04	...	8.57	...	27	18	35	10.32	8.30	9.41	16.04	15.36	15.73
...	35	...	10.79	02	85	09	62	12.65	12.80	12.72	15.58	15.87	15.71
...	49	...	2.39	2.53	4.90	23	4.09	12.94	17.41	14.63	13.22	15.23	13.97
...	02	...	7.09	38	2.36	40	13.03	21.63	25.21	23.28	24.36	25.27	24.80
...	...	...	5.39	24	2.01	06	1.71	9.85	8.75	9.41	11.42	13.35	12.19
...	14	...	14.11	...	3.80	...	4.47	22.60	22.44	22.52	22.33	24.94	23.61
...	3.11	...	23.41	2.28	5.38	...	4.57	35.28	42.72	38.75	28.69	37.83	32.94
002	34	...	9.08	36	1.19	17	2.35	13.09	14.02	13.50	15.07	16.02	15.50
...	...	...	7.71	...	07	15	07	9.11	6.59	8.00	8.89	9.55	9.18
...	08	...	9.98	...	29	18	16	9.89	11.68	10.69	8.68	8.60	8.64
...	42	...	5.82	06	08	17	13	7.17	6.04	6.68	9.14	8.80	8.99
...	33	...	9.83	07	11	11	43	10.48	11.37	10.88	9.37	10.05	9.67
...	70	...	7.02	02	14	04	36	9.37	6.95	8.28	11.15	10.95	11.06
...	96	...	4.89	06	1.14	1.08	31	7.91	9.06	8.44	9.20	11.13	9.97
...	36	...	7.78	03	21	13	30	9.03	8.55	8.81	9.41	9.66	9.52
001	23	02	4.03	1.50	6.88	33	8.01	20.01	22.01	21.00	19.16	21.81	20.14
0003	201	0003	7.72	04	1.36	17	65	10.43	9.76	10.14	11.91	11.68	11.80
0005	21	004	7.07	30	2.35	21	1.95	12.07	11.98	12.09	13.19	13.41	13.28

Deaths registered in the districts (rural circles) and in the towns.

	January.	February.	March.	April.	May.
A.—DISTRICTS (EXCLUDING TOWNS).					
Karachi	482	467	257	222	186
Hyderabad	644	602	489	338	291
Nawabshah	742	536	472	413	339
Thar Parkar	697	653	704	611	446
Larkana	479	393	418	312	375
Dadu	397	302	259	257	266
Sukkur	618	516	489	412	389
Upper Sind Frontier	176	234	181	166	206
Total for Districts ...	4,235	3,703	3,269	2,781	2,498
Ratio per mile of population ...	1·33	1·16	1·03	·87	·78
B.—TOWNS					
<i>Karachi District.</i>					
Karachi T. C. ...	575	483	511	533	478
Karachi C. C. ...	11	4	10	7	9
Drigh Road ... .. „ ...	...	...	...	3	...
Tatta T. C. ...	11	14	14	21	12
Ketibundar „ ...	2	3	4	...	3
<i>Hyderabad District.</i>					
Hyderabad T. C. ...	305	236	246	211	219
Hyderabad C. C. ...	3	7	1	5	2
Hala T. C. ...	6	3	5	7	5
Matuari „ ...	13	11	8	7	7
Tando Muhammadkhan „ ...	7	15	5	6	10
Nasarpur „ ...	11	5	12	4	2
Tando Allahyar „ ...	19	10	6	3	...
<i>Nawabshah District.</i>					
Nawabshah T. C. ...	2	4	1	2	10
Tando Adam „ ...	21	18	5	10	13
Shahdadpur „ ...	9	10	10	11	6
<i>Thar Parkar District.</i>					
Mirpurkhas T. C. ...	37	35	23	17	11
Umarkot „ ...	8	8	4	6	5
<i>Larkana District.</i>					
Larkana T. C. ...	64	44	41	35	66
Kambar „ ...	11	4	12	6	8
Ratodero „ ...	13	12	5	6	12

No. III.

of the Province of Sind during each month of the year 1937.

June.	July.	August.	September.	October.	November.	December.	Total deaths registered during the year.
153	160	156	127	184	263	236	2,893
245	265	282	300	267	323	408	4,504
272	285	287	250	257	299	336	4,488
351	333	283	259	416	433	410	5,596
262	289	320	326	408	428	384	4,394
194	208	181	195	195	228	274	2,956
332	321	392	376	420	587	586	5,438
135	136	155	148	232	193	199	2,161
1,944	1,997	2,056	1,981	2,379	2,754	2,833	32,430
·61	·63	·64	·62	·74	·86	·89	10·17
453	514	619	532	484	446	538	6,176
8	10	11	10	9	8	6	103
...	...	...	1	1	...	...	5
7	7	6	8	13	9	6	128
2	7	...	...	3	2	3	29
179	192	227	188	225	242	295	2,765
3	...	3	1	2	1	2	30
5	3	5	5	7	5	12	68
5	3	3	6	6	7	9	85
5	10	4	9	6	6	7	90
1	5	2	4	7	6	6	65
13	6	4	3	7	8	7	86
8	9	3	14	13	12	19	97
9	15	19	9	14	9	22	164
4	5	3	3	1	11	15	88
11	8	7	7	10	14	18	198
1	3	4	7	6	7	7	66
37	49	27	29	38	64	63	557
5	10	8	6	11	12	15	108
18	12	19	12	15	16	24	164

				January.	February.	March.	April.	May.
B.—TOWNS—contd.								
<i>Dadu District.</i>								
Kotri ...	...	...	T. C. ...	12	14	8	5	13
Dadu...	...	...	" ...	9	7	5	3	4
Sehwan	...	...	" ...	4	6	4	2	4
Manjhand	...	...	" ...	4	2	7	4	5
<i>Sukkur District.</i>								
Sukkur	...	...	T. C. ...	103	77	75	70	99
Shikarpur	...	...	" ...	184	126	130	141	152
Rohri ..	...	...	" ...	17	16	17	7	16
Garhiyassin	...	...	" ...	18	14	15	16	18
Ghotki	...	...	" ...	22	17	10	7	11
<i>Upper Sind Frontier District.</i>								
Jacobabad	...	...	T. C. ...	23	17	8	4	12
Total for towns ...				1,524	1,222	1,202	1,159	1,207
Ratio per mile of towns ...				2.22	1.78	1.75	1.69	1.76
Total for the province ...				5,759	4,925	4,471	3,940	3,705
Ratio per mile for the province ...				1.49	1.27	1.15	1.02	.96

No. III—*concl'd.*

June.	July.	August.	September.	October.	November.	December.	Total deaths registered during the year.
6	4	9	5	5	7	15	103
2	...	4	3	3	4	10	54
1	8	1	3	2	2	6	43
1	2	2	3	2	1	11	44
75	76	73	80	92	93	101	1,014
90	93	87	71	86	129	166	1,455
14	9	6	16	15	13	13	159
13	11	11	3	11	19	22	166
13	15	26	20	15	16	15	187
7	7	7	11	7	16	14	133
996	1,093	1,230	1,069	1,096	1,185	1,447	14,430
1'45	1'60	1'79	1'56	1'60	1'73	2'09	21'01
2,940	3,090	3,286	3,050	3,475	3,939	4,280	46,860
·76	·80	·85	·79	·90	1'02	1'10	12'09

Deaths registered according to age in the districts (rural circles) and towns

Districts and Towns.	Under one year.									
	Not exceeding one month.						Total.			
	Male.			Female.						
	Under one week.	Over one week.	Total.	Under one week.	Over one week.	Total.				
A—DISTRICTS (EXCLUDING TOWNS).										
Karachi	53	46	99	40	44	84	183			
Hyderabad	80	65	145	59	58	117	262			
Nawabshah	84	80	164	52	71	123	287			
Thar Parkar	98	63	161	91	53	144	305			
Larkana... ..	102	94	196	77	71	148	344			
Dadu	64	57	121	50	37	87	208			
Suk'kur	78	115	193	96	90	186	379			
Upper Sind Frontier	27	28	55	17	20	37	92			
Total Districts (exclusing Towns) ...	586	548	1,134	482	444	926	2,060			
B.—TOWNS.										
Karachi District.										
Karachi T. C. ...	237	125	362	143	100	243	605			
Karachi C. C. ...	3	1	4	3	1	4	8			
Drigh Road ... .. „ ...	...	...	...	...	...	...	...
Tatta T. C. ...	3	...	3	1	2	3	6			
Ketibandar ... .. „ ...	...	...	...	1	1	2	2
Hyderabad District.										
Hyderabad T. C. ...	111	87	198	75	70	145	343			
Hyderabad C. C. ...	...	1	1	...	...	...	1
Hala T. C. ...	1	5	6	3	1	4	10			
Matlari „ ...	1	2	3	2	1	3	6			
Tando Muhammadkhan „ ...	1	1	2	...	3	3	5			
Nasarpur „ ...	3	1	4	1	1	2	6			
Tando Allahyar ... .. „ ...	...	3	3	1	1	2	5		
Nawabshah District.										
Nawabshah T. C. ...	10	3	13	6	5	11	24			
Tando Adam „ ...	5	2	7	1	3	4	11			
Shahdādpur „ ...	2	1	3	4	3	7	10			
Thar Parkar District.										
Mirpurkhas T. C. ...	2	1	3	...	1	1	4			
Umarkot „ ...	1	1	2	1	1	2	4			
Larkana District.										
Larkana T. C. ...	13	18	31	10	13	23	54			
Kambar „ ...	3	2	5	1	1	2	7			
Ratodero „ ...	2	3	5	1	1	2	7			

No. IV.

*of the Province of Sind during the year 1937.*Under one year—*contd.*

Over one month and not exceeding six months.			Over six months and not exceeding twelve months.			Total.			One and under five years.	
Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.
95	88	183	33	27	60	227	199	426	172	172
135	101	236	47	37	84	327	255	582	263	198
102	109	211	50	44	94	316	276	592	297	249
137	112	249	65	48	113	363	304	667	396	341
181	120	301	92	76	168	469	344	813	363	345
99	82	181	41	21	62	261	190	451	228	184
270	190	460	106	94	200	569	470	1,039	528	465
78	60	138	43	23	66	176	120	296	269	221
1,097	862	1,959	477	370	847	2,708	2,158	4,866	2,516	2,175
343	323	665	371	333	704	1,076	898	1,974	548	557
10	6	16	7	1	8	21	11	32	7	7
1	1	2	...	...	...	1	1	2	1	1
6	5	11	10	3	13	19	11	30	8	4
...	1	1	4	...	4	4	3	7	1	2
120	104	224	143	127	270	461	376	837	175	179
1	...	1	2	...	2	4	...	4	2	...
3	2	5	3	...	3	12	6	18	7	2
1	2	3	...	...	...	4	5	9	4	...
2	3	5	2	3	5	6	9	15	3	6
1	...	1	2	...	2	7	2	9	4	...
1	2	3	2	3	5	6	7	13	2	5
6	2	8	2	1	3	21	14	35	5	7
5	4	9	3	3	6	15	11	26	14	8
2	2	4	1	1	2	6	10	16	6	...
3	4	7	4	2	6	10	7	17	9	3
...	1	1	...	1	1	2	4	6	4	8
24	22	46	47	29	76	102	74	176	52	37
4	5	9	2	3	5	11	10	21	9	5
4	9	13	7	8	15	16	19	35	22	23

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				Under one year.							
				Not exceeding one month.						Total.	
				Male,			Female.				
				Under one week.	Over one week.	Total.	Under one week.	Over one week.	Total.		
B—TOWNS—contd.											
Dadu District.											
Kotri	...	...	T. C.	...	...	...	1	1	2	2
Dadu	...	...	"	...	4	4	1	4	5	9
Sehwan	...	...	"	1	...	1	1	...	1	2
Manjhand	...	...	"	...	1	1	...	1	1	2
Sukkur District.											
Sukkur	...	...	T. C.	26	21	47	15	16	31	78
Shikarpur	...	...	"	30	25	55	29	23	52	107
Rohri	...	...	"	3	6	9	1	4	5	14
Garhi Yasin	...	...	"	10	3	13	4	2	6	19
Ghotki	...	...	"	15	10	25	9	10	19	44
Upper Sind Frontier District.											
Jacobabad	...	...	T. C.	1	3	4	1	...	1	5
Total for towns				484	330	814	316	270	586	1,400	
Total for the province				1,070	878	1,948	798	714	1,512	3,460	
Ratio per mile of population				...	...	...	...	...	...	...

No. IV—*contd.*

Under one year— <i>contd.</i>									One and under five years.	
Over one month and not exceeding six months.			Over six months and not exceeding twelve months.			Total.				
Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.
5	4	9	5	3	8	10	9	19	9	6
2	...	2	...	2	2	6	7	13	3	4
3	...	3	2	...	2	6	1	7	3	2
...	1	1	2	...	2	3	2	5	7	2
51	38	89	58	64	122	156	133	289	114	98
79	91	170	81	85	166	215	228	443	98	120
12	5	17	5	8	13	26	18	44	5	3
8	10	18	7	2	9	28	18	46	17	15
16	11	27	6	15	21	47	45	92	11	22
8	5	13	3	7	10	15	13	28	11	9
721	662	1,333	781	704	1,485	2,316	1,952	4,268	1,161	1,135
1,818	1,524	3,342	1,258	1,074	2,332	5,024	4,110	9,134	3,677	3,310
...	...	...	...	...	...	116'57	119'85	118'02	14'79	13'92

ANNUAL FORM

				Five and under ten years		Ten and under 15 years.		15 and under 20 years.	
				Male.	Female.	Male.	Female.	Male.	Female.
A—DISTRICTS (EXCLUDING TOWNS),									
Karachi	...	...	...	79	49	53	44	50	36
Hyderabad	...	...	...	106	113	103	78	84	67
Nawabshah	...	...	...	153	119	100	79	93	65
Thar Parkar	...	...	...	168	154	132	84	117	77
Larkana	...	...	...	191	186	112	92	73	57
Dadu	...	...	...	120	108	68	68	44	49
Sukkur	...	...	...	194	188	118	89	79	86
Upper Sind Frontier	...	...	...	123	95	67	44	37	33
Total				1,134	1,012	753	578	577	470
B—TOWNS.									
<i>Karachi District.</i>									
Karachi	...	...	T. C. ...	115	97	56	62	86	105
Karachi	...	...	C. C. ...	8	1	...	2	3	1
Drigh Road	...	...	" ...	...	...	...	...	...	...
Tatta	...	...	T. C. ..	3	7	3	1	1	6
Ketibandar	...	...	" ...	1	...	1	1	...	...
<i>Hyderabad District.</i>									
Hyderabad	...	...	T. C. ...	39	24	28	32	57	63
Hyderabad	...	...	C. C. ...	...	1	...	...	1	...
Hala	...	...	T. C. ...	3	...	...	...	...	3
Matari	...	...	" ...	1	2	...	...	1	1
Tando Muhammadkhan	...	...	" ...	1	1	2	3	1	...
Nasarpur	...	...	" ...	3	...	3	...	1	2
Tando Allahyar	...	...	" ...	1	1	3	...	...	5
<i>Nawabshah District.</i>									
Nawabshah	...	...	T. C. ...	1	1	2	2	3	3
Tando Adam	...	...	" ...	5	2	1	1	5	5
Shahdadpur	...	...	" ...	1	4	...	3	1	2
<i>Thar Parkar District.</i>									
Mirpurkhas	...	...	T. C. ...	5	2	3	1	3	2
Umarkot	...	...	" ...	...	1	1	2	2	5
<i>Larkana District.</i>									
Larkana	...	...	T. C. ...	16	15	7	11	7	15
Kambar...	...	...	" ..	5	5	1	1	...	2
Batodero	...	...	" ...	8	15	1	3	2	3

No. IV--*contd.*

20 and under 30 years.		30 and under 40 years.		40 and under 50 years.		50 and under 60 years.		60 years and upwards.		Ages not known.		Total (all ages.)	
Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.
180	196	230	183	236	101	176	99	248	163	...	...	1,651	1,242
250	280	334	273	402	182	283	142	498	266	...	...	2,650	1,854
284	279	319	274	310	155	275	125	457	263	...	...	2,604	1,884
378	281	418	290	372	217	347	193	617	347	...	...	3,308	2,288
215	239	238	231	215	133	170	114	360	247	...	...	2,406	1,988
117	177	159	173	168	112	166	66	304	194	...	...	1,635	1,321
253	288	275	275	281	160	210	122	497	291	...	...	3,004	2,434
82	97	106	106	91	73	93	49	195	84	...	...	1,239	922
1,759	1,837	2,079	1,805	2,075	1,133	1,720	910	3,176	1,855	...	...	18,497	13,933
274	280	257	198	267	121	229	106	486	358	...	...	3,394	2,782
7	5	6	5	7	3	1	2	4	7	...	...	59	44
1	...	...	...	...	...	...	...	...	...	...	...	3	2
6	5	5	5	5	4	11	4	13	7	...	...	74	54
2	...	2	1	2	...	1	1	3	4	...	...	17	12
165	128	159	81	166	61	154	64	194	159	...	...	1,598	1,167
...	3	2	2	4	2	1	3	3	2	...	...	17	13
3	1	5	3	2	1	6	3	9	2	...	...	47	21
3	8	7	1	4	4	7	4	16	13	...	...	47	38
6	10	4	3	9	3	8	2	7	6	...	...	47	43
1	6	3	3	3	3	7	4	8	5	...	...	40	25
3	7	7	6	7	2	2	6	8	8	...	...	39	47
3	6	8	5	4	...	1	2	5	4	...	...	53	44
8	9	14	10	14	6	10	7	9	10	...	...	95	69
1	12	4	8	4	7	8	3	5	3	...	...	36	52
26	17	32	7	23	3	17	6	11	6	...	...	139	59
4	8	4	3	4	2	3	...	3	6	...	...	27	39
18	44	25	17	29	11	22	16	16	23	...	...	294	263
4	7	6	2	7	3	7	4	8	11	...	...	58	50
2	12	5	6	...	2	5	...	13	7	...	...	74	90

				Five and under ten years.		Ten and under 15 years.		15 and under 20 years.	
				Male.	Female.	Male.	Female.	Male.	Female.
B.—TOWNS—contd.									
<i>Dadu District.</i>									
Kotri ...	...	...	T. C. ...	2	...	2	1	3	2
Dadu ...	...	...	" ...	1	2	1	2	...	...
Sehwan ...	...	...	" ...	2	1	1	2	2	...
Manjhand ...	...	...	" ...	...	1	...	1	2	1
<i>Sukkur District.</i>									
Sukkur ...	...	...	T. C. ...	28	26	17	15	9	25
Shikarpur ...	...	...	" ...	23	21	17	19	15	39
Rohri ...	...	...	" ...	2	1	1	1	2	4
Garhi Yasin ...	...	...	" ...	6	3	1	3	1	2
Ghotki ...	...	...	" ...	1	3	1	3	1	5
<i>Upper Sind Frontier District.</i>									
Jacobabad ...	...	...	T. C. ...	4	3	2	2	1	3
Total for towns ...				280	240	155	174	210	304
Total for the province ...				1,414	1,252	908	752	787	774
Ratio per mille of population ...				4.94	5.62	3.67	4.33	4.17	5.26

No. IV--*concl'd.*

20 and under 30 years.		30 and under 40 years.		40 and under 50 years.		50 and under 60 years.		60 years and upwards.		Ages not known.		Total (all ages).	
Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.
4	8	6	4	12	3	9	1	6	6	...	...	63	40
3	1	5	3	3	1	3	3	3	3	...	...	28	26
2	3	1	...	...	2	2	2	10	1	...	...	29	14
1	3	1	...	2	...	2	1	7	8	...	...	25	19
39	40	40	35	39	23	45	12	74	46	...	...	561	453
35	72	43	46	67	39	70	14	147	127	...	...	730	725
6	10	12	6	12	4	13	5	21	7	...	...	100	59
4	10	2	4	4	5	9	4	13	17	...	...	85	81
3	5	3	5	7	2	4	2	13	4	...	...	91	96
5	4	5	3	12	3	7	5	13	13	...	...	75	58
639	724	673	472	719	325	664	286	1,128	873	...	...	7,945	6,485
2,398	2,561	2,752	2,277	2,794	1,458	2,384	1,196	4,304	2,728	...	...	26,442	20,418
5.61	7.42	7.91	9.22	13.35	9.92	22.84	15.22	63.54	48.38	...	...	12.07	11.98

ANNUAL FORM

Deaths registered according to classes and sex in

1	2							
No.	Districts.				NUMBER OF			
					Muhammadans.		Hindus.	
					Male.	Female.	Male.	Female.
1	Karachi	...	...	...	3,269	2,581	1,829	1,488
2	Hyderabad	...	...	...	2,741	1,820	1,722	1,378
3	Nawabshah	...	...	...	2,008	1,468	773	575
4	Thar Parkar	...	...	...	2,042	1,421	1,429	965
5	Larkana	...	...	...	2,187	1,808	642	581
6	Dadu	...	...	...	1,397	1,105	381	313
7	Sukkur	...	...	...	2,719	2,133	1,842	1,711
8	Upper Sind Frontier	...	...	...	1,105	832	209	147
	Total for the Province				17,468	13,168	8,827	7,158

1	2							
No.	Districts.				RATIO OF DEATHS			
					Muhammadans.		Hindus.	
					Male.	Female.	Male.	Female.
1	Karachi	...	...	...	14.15	14.10	20.51	24.44
2	Hyderabad	...	...	...	10.54	9.06	15.76	15.46
3	Nawabshah	...	...	...	9.38	8.96	12.20	10.95
4	Thar Parkar	...	...	...	14.76	13.20	11.74	9.93
5	Larkana	...	...	...	10.69	10.96	14.21	15.80
6	Dadu	...	...	...	8.81	8.90	13.45	13.60
7	Sukkur	...	...	...	10.94	11.13	18.99	21.27
8	Upper Sind Frontier	...	...	...	8.46	7.99	13.94	13.85
	Total for the Province				11.02	10.62	18.51	15.90

No. V.

the Province of Sind during the year 1937.

3

DEATHS REGISTERED

Jains.		Christians.		Parsis.		Other Classes.	
Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.
..	...	59	45	13	13	28	9
...	...	3	1	...	...	19	9
...	2	...	...	7	4
1	...	2	...	...	...	...	...
...	...	1	1	...	...	2	1
...	2	2
1	...	1	1	...	...	8	3
...	1	...	...	...	...
...	...	66	51	13	13	66	28

4

PER 1,000 OF POPULATION.

Jains.		Christians.		Parsis.		Other Classes.	
Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.
...	...	10.25	10.50	7.41	8.14	39.21	14.80
...	...	9.55	4.27	...	...	13.13	10.42
...	3.66	...	...	4.20	3.45
5.81	...	27.02	...	...	...	...	...
...	...	55.55	90.90	...	...	5.10	4.13
...	18.51	13.42
500.00	...	2.08	2.88	...	...	16.66	8.76
...	250.00	..	...	...	...
3.17	...	9.54	9.77	6.96	7.79	7.16	4.56

ANNUAL FORM

Deaths registered from different causes and Births in the Districts

1	2				3	4				
No.	Districts and Towns.				Population according to Census of 1931.	Births,				
						Male.	Female.	Total.	Birth rate.	
A.—DISTRICTS.										
1	Karachi	...	...	...	...	1,944	1,413	3,357	10·74
2	Hyderabad	...	...	...	...	3,182	2,254	5,436	10·22
3	Nawabshah	...	...	...	...	4,137	2,904	7,041	15·06
4	Thar Parkar	...	...	...	...	3,965	3,115	7,080	15·59
5	Larkana	...	...	...	...	5,293	4,104	9,397	23·01
6	Dadu	...	...	...	...	3,065	2,397	5,462	17·67
7	Sukkur	...	...	...	...	5,101	3,866	8,967	19·37
8	Upper Sind Frontier	...	...	...	...	2,137	1,549	3,686	15·07
Total of the Districts (excluding towns) ...					31,89,531	28,824	21,602	50,426	15·81	
B.—TOWNS.										
KARACHI DISTRICT.										
9	Karachi	...	...	T. C.	...	7,156	6,726	13,882	56·02
10	Karachi	...	...	C. C.	...	200	176	376	58·67
11	Drigh Road	...	...	C. C.	...	12	10	22	11·00
12	Tatta	...	...	T. C.	...	73	50	123	12·77
13	Ketibundar	...	...	T. C.	...	24	18	42	25·37
HYDERABAD DISTRICT.										
14	Hyderabad	...	...	T. C.	...	2,176	1,904	4,080	42·49
15	Hyderabad	...	...	C. C.	...	28	27	55	12·14
16	Hala	...	...	T. C.	...	70	51	121	16·57

No. VI.

and Towns of the Province of Sind during the Year 1937.

5	6	7	8	9	10	11 INJURIES.	
Cholera.	Small pox.	Plague.	Fevers.	Dysentery and Diarrhœa.	Respiratory Diseases,	Suicide.	
						Male.	Female.
...	14	1	1,456	11	1,078	...	...
...	16	...	3,031	18	1,056	...	1
...	46	...	3,533	22	547	...	...
...	51	...	3,875	56	1,131	...	1
...	210	...	3,738	6	107	...	2
...	68	...	2,302	15	256	...	2
1	158	...	4,753	11	165	2	1
...	79	...	1,950	8	32	...	...
1	642	1	24,638	147	4,372	3	7
..	44	14	195	652	2,695	1	...
...	...	1	32	7	13	...	...
...	...	...	5	...	...	...	...
...	17	...	49	2	39	...	...
...	...	...	10	4	8	...	...
...	3	...	441	120	918	...	...
...	...	...	14	...	5	...	...
...	...	...	44	...	14	...	...

ANNUAL FORM

1	2				11				12	13	
No	Districts and Towns.				INJURIES.— <i>contd.</i>				All other causes	Total deaths from all causes.	
					Wound- ing or Accident.	Snake- bite, or killed by wild beasts.	Rabies.	Total.			
A.—DISTRICTS.											
1	Karachi	...	...	...	31	29	...	60	273	2,893
2	Hyderabad	...	...	...	38	36	1	76	307	4,504
3	Nawabshah	...	...	...	46	43	...	90	250	4,488
4	Thar Parkar	...	...	...	45	28	5	79	404	5,596
5	Larkana	...	...	...	76	27	4	109	224	4,394
6	Dadu	...	...	...	20	31	...	53	262	2,956
7	Sukkur	...	...	...	41	18	...	62	288	5,438
8	Upper Sind Frontier	..	...	...	23	10	..	33	59	2,161
Total of the Districts (excluding town) ...					320	222	10	562	2,067	32,430	
B.—TOWNS.											
KARACHI DISTRICT.											
9	Karachi	T. C.	...	99	...	3	103	2,473	6,167
10	Karachi	C. C.	...	2	2	48	103
11	Drigh Road	C. C.	5
12	Tatta	T. C.	21	128
13	Ketibunder	T. C.	...	1	1	6	29
HYDERABAD DISTRICT.											
14	Hyderabad	T. C.	...	47	...	2	49	1,234	2,765
15	Hyderabad	C. C.	11	30
16	Hala	T. C.	...	1	1	9	68

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RATIO OF DEATHS PER 1,000 POPULATION.

Cholera.	Small-pox.	Plague.	Fevers.	Dysentery and Diarrhœa.	Respiratory Diseases.	Injuries	All other causes.	From all Causes.	
								For the year.	Mean of previous five years.
...	·04	·003	4·66	·03	3·46	·19	·88	9·27	10·54
...	·03	...	5·71	·03	2·00	·14	·57	8·48	10·15
...	·09	...	7·55	·05	1·17	·19	·53	9·58	10·85
...	·11	...	8·54	·12	2·48	·1	·89	12·32	13·34
...	·51	...	9·15	·02	·27	·27	·51	10·76	12·32
...	·23	...	7·44	·05	·83	·17	·84	9·56	11·54
·002	·34	...	10·27	·03	·35	·13	·62	11·75	14·28
...	·32	...	7·98	·04	·12	·13	·23	8·82	9·49
·0003	·20	·0003	7·72	·05	1·37	·17	·65	10·16	11·80
...	·20	·05	·79	2·63	10·87	·41	9·88	24·93	25·01
...	...	·16	5·12	1·14	2·08	·32	7·84	16·61	17·47
...	...	..	2·50	...	...	...	..	2·50	...
...	1·76	...	5·08	·21	4·05	...	2·18	13·28	12·56
...	...	...	7·11	2·40	4·80	·6)	2·61	17·52	21·75
...	·03	...	4·60	1·25	9·57	·51	12·84	28·80	} 26·11
...	...	...	3·09	...	1·11	...	2·42	6·22	
...	...	...	6·02	...	1·92	·14	1·23	9·31	

ANNUAL FORM

1	2	3	4			
No.	Districts and Towns.	Population according to Census of 1931.	Births.			
			Male.	Female.	Total.	Birth rate.
B,—TOWNS.— <i>contd.</i>						
HYDERABAD DISTRICT.— <i>contd.</i>						
17	Matiari T. C. ...	...	51	38	89	13.30
18	Tando Muhammadkhan ... T. C. ...	...	39	21	60	9.05
19	Nasarpur T. C. ...	...	29	32	61	14.34
20	Tando Allahyar T. C. ...	...	38	19	57	11.08
NAWABSHAH DISTRICT.						
21	Nawabshah T. C. ...	...	35	21	56	7.97
22	Tando Adam T. C. ...	...	138	103	241	17.88
23	Shahdadpur T. C. ...	...	72	46	118	13.32
THAR PARKAR DISTRICT.						
24	Mirpurkhas T. C. ...	...	65	41	106	10.41
25	Umarkot T. C. ...	...	41	23	64	16.50
LARKANA DISTRICT.						
26	Larkana T. C. ...	...	547	440	987	36.72
27	Kambar T. C. ...	...	120	89	209	21.39
28	Ratodero T. C. ...	...	106	100	206	28.27
DADU DISTRICT.						
29	Dadu T. C. ...	...	39	18	57	8.69
30	Kotri T. C. ...	...	75	63	138	13.75
31	Sehwan T. C. ...	...	38	24	62	10.70
32	Manjhand T. C. ...	...	36	45	81	29.50

No. VI.—*contd.*

5	6	7	8	9	10	11 INJURIES.	
Cholera.	Smallpox.	Plague.	Fevers.	Dysentery and Diarrhoea.	Respiratory Diseases.	Suicide. .	
						Male.	Female.
...	35	...	25	...	...
...	39	3	32	...	...
...	29	1	28	...	...
...	40	1	13	...	...
...	63	...	21	...	...
1	56	6	40	...	...
...	53	...	17	...	...
...	49	2	112	...	...
...	48	...	12	...	...
...	11	...	212	7	86	...	...
...	90	...	7	...	...
...	14	...	114	1	...	...	...
...	1	...	32	...	5	...	...
...	51	7	29	...	...
...	21	...	9	...	...
...	27	1	5	...	...

ANNUAL FORM

1	2	11				12	13
No.	District and Towns.	INJURIES.— <i>contd.</i>				All other causes.	Total deaths from all causes.
		Wound- ing or Accident.	Snake bite, or killed by wild beasts.	Rabies.	Total.		
B.—TOWNS.— <i>contd.</i>							
HYDERABAD DISTRICT.— <i>concl'd.</i>							
17	Matitari T. C. ...	1	...	1	2	23	85
18	Tando Muhammad Khan ... T. C. ...	2	...	...	2	14	90
19	Nasarpur T. C. ...	...	1	...	1	6	65
20	Tando Allahyar T. C. ...	2	1	...	3	29	86
NAWABSHAH DISTRICT.							
21	Nawabshah T. C. ...	...	...	...	...	13	97
22	Tando Adam T. C. ...	3	1	...	4	57	164
23	Shahdadpur T. C. ...	2	...	...	2	16	88
THAR PARKAR DISTRICT.							
24	Mirpurkhas T. C. ...	4	...	1	5	30	198
25	Umarkot T. C. ...	...	...	...	...	6	66
LARKANA DISTRICT.							
26	Larkana T. C. ...	5	...	...	5	226	557
27	Kambar T. C. ...	4	1	...	5	6	108
28	Ratodero T. C. ...	...	...	...	...	5	164
DADU DISTRICT.							
29	Dadu T. C. ...	...	...	...	...	16	54
30	Kotri T. C. ...	...	...	...	...	16	103
31	Sehwan T. C. ...	...	...	...	...	13	43
32	Manjhand T. C. ...	1	...	...	1	10	44

No. VI.—*contd.*

14

RATIO OF DEATHS PER 1,000 OF POPULATION.

Cholera.	Small-Pox.	Plague.	Fevers.	Dysentery and Diarrhoea.	Respiratory Diseases.	Injuries	All other causes.	From all Causes.	
								For the year.	Mean of previous five years.
...	5.22	...	3.73	.30	3.45	12.70	16.29
...	5.89	.45	4.83	.30	2.11	13.58	16.60
...	6.82	.23	6.58	.23	1.42	15.28	19.98
...	7.79	.19	2.52	.58	5.63	16.71	12.83
...	8.97	...	2.99	...	1.85	13.81	6.12
.07	4.14	.44	3.01	.29	4.21	12.16	17.67
...	6.01	...	1.91	.23	1.88	9.94	10.06
...	4.82	.20	11.00	.49	2.95	19.46	12.96
...	12.49	...	3.15	...	1.55	17.19	24.99
...	.41	...	7.90	.26	3.21	.18	8.79	20.75	19.52
...	9.26	...	.71	.52	.62	11.11	14.30
...	1.93	...	19.75	.14	...	...	.69	22.51	19.90
...	.15	...	4.88	...	.76	...	2.44	8.23	7.16
...	5.08	.70	2.89	...	1.60	10.27	10.56
...	3.62	...	1.56	...	2.24	7.42	8.28
...	9.83	.36	1.82	.36	3.65	16.02	17.48

ANNUAL FORM

1	2	3	4			
No.	Districts and Towns.	Population according to census of 1931.	Births.			
			Male.	Female.	Total.	Birth-rate.
B.—TOWNS.— <i>contd.</i>						
SUKKUR DISTRICT.						
33	Sukkur... .. T. C. ...	...	1,411	1,175	2,586	37·33
34	Shikarpur T. C. ...	...	1,128	992	2,120	33·92
35	Rohri T. C. ...	...	166	152	318	18·81
36	Garhi Yasin T. C. ...	...	127	98	225	30·53
37	Ghotki T. C. ...	...	120	120	240	49·73
UPPER SIND FRONTIER DISTRICT.						
38	Jacobabad T. C. ...	...	114	67	181	11·49
Total of Towns ...		6,86,857	14,274	12,689	26,963	39·26
Total of Province ...		38,76,388	43,093	34,291	77,389	19·76

No. VI.—*concl'd.*

5	6	7	8	9	10	11 INJURIES.	
Cholera.	Small-pox.	Plague.	Fevers.	Dysentery and Diarrhoea.	Respiratory Diseases.	Suicide.	
						Male.	Female.
...	34	...	165	176	340	...	...
...	1	...	443	24	147	3	...
...	...	...	91	4	34	...	...
...	1	...	104	...	28	...	...
...	15	...	113	11	26	...	...
...	15	...	77	1	18	...	...
1	156	15	2,772	1,030	4,726	4	...
2	798	16	27,410	1,177	9,098	7	7

ANNUAL FORM

1	2				11				12	13		
No.	District and Towns.				INURIES.— <i>contd.</i>				All other causes.	Total deaths from all causes.		
					Wound- ing or Accident.	Snake bite, or killed by wild beasts.	Rabies	Total.				
B.—TOWNS.— <i>contd.</i>												
SUKKUR DISTRICT.												
33	Sukkkur	...	...	T. C.	...	16	...	...	16	283	1,014
34	Shikarpur	..	...	T. C.	...	23	...	...	26	814	1,455
35	Rohri	...	...	T. C.	...	1	...	...	1	29	159
3	Garhi Yasin	...	...	T. C.	...	...	...	...	...	33	166
37	Ghotki	...	...	T. C.	...	...	...	...	...	22	184
UPPER SIND FRONTIER DISTRICT.												
38	Jacobabad	...	...	T. C.	...	...	...	...	...	22	133
Total of Towns						...	214	4	7	229	5,501	14,430
Total of Province						...	534	226	17	791	7,568	46,860

No. VI.—*concl'd.*

14

RATIO OF DEATHS PER 1,000 OF POPULATION.

Cholera.	Small-pox.	Plague.	Fevers.	Dysentery and Diarrhoea.	Respiratory Diseases.	Injuries.	All other causes.	From all Causes.	
								For the year.	Mean of previous five year.
...	'49	...	2'39	2'53	4'90	'23	4'09	14'63	13'97
...	'02	...	7'09	'38	2'36	'40	13'03	23'28	24'80
...	...	...	5'39	'24	2'01	'06	1'71	9'41	12'19
...	'14	...	14'11	...	3'80	...	4'47	22'52	23'61
...	3'11	...	23'41	2'28	5'38	...	4'57	38'75	32'94
...	'96	...	4'89	'06	1'14	...	1'39	8'44	9'97
'001	'23	'02	4'03	1'50	6'88	'33	8'01	21'00	20'14
'0005	'21	'004	7'07	'30	2'35	'21	1'95	12'09	13'28

ANNUAL FORM

Deaths registered from certain diseases in the districts

1	2				3	4		5		6		
No.	Districts and Towns.				Population according to Census of 1931.	Enteric Fever.		Measles.		Cerebro-spinal Fever.		
						Deaths.	Ratio.	Deaths.	Ratio.	Deaths.	Ratio.	
A.—DISTRICTS.												
1	Karachi	...	...	...	...	4	'01	...	...	...	...
2	Hyderabad	...	...	...	...	6	'01	1	'002	...	...
3	Nawabshah	...	...	...	...	24	'05	35	'07	1	'002
4	Thar Parkar	...	...	...	...	51	'11	25	'06	...	...
5	Larkana	...	...	...	...	17	'04	32	'08	...	...
6	Dadu	...	...	...	...	19	'06	12	'04	...	...
7	Sukkur	...	...	...	...	24	'05	47	'10	3	'01
8	Upper Sind Frontier	...	...	...	...	8	'04	14	'05	...	...
Total of the Districts (excluding towns)					...	153	'05	166	'05	4	'001	
B.—TOWNS.												
KARACHI DISTRICT.												
9	Karachi	T. C.	...	2,47,791	35	'14	45	'18	4	'02
10	Karachi	C. C.	...	6,240	3	'48
11	Drigh Road	C. C.	...	2,000
12	Tatta	C. C.	...	9,035	3	'30	2	'21
13	Ketibandar	C. C.	...	1,655	1	'60
HYDERABAD DISTRICT.												
14	Hyderabad	T. C.	...	96,021	43	'45	17	'18	'6	'96
15	Hyderabad	C. C.	...	4,530
16	Hala	T. C.	...	7,304

No. VI (a).

and towns of the Province of Sind during the year 1937.

7		8		9		10		11		12		13	
Malaria.		Other Fevers.		Influenza.		Diphtheria.		Chicken-pox.		Whooping Cough.		Cancer.	
Deaths.	Ratio.	Deaths.	Ratio.	Deaths.	Ratio.	Deaths.	Ratio.	Deaths.	Ratio.	Deaths.	Ratio.	Deaths.	Ratio.
76	·24	1,376	4·41	...	...	...	...	...	...	...	...	...	...
58	·11	2,966	5·59	...	...	...	...	...	...	...	...	...	...
43	·09	3,430	7·34	...	...	...	...	1	·002	2	·004	...	...
59	·13	3,740	8·24	...	...	...	...	...	...	...	...	...	...
51	·12	3,638	8·91	...	...	1	·002	2	·005	...	...	...	...
51	·16	2,220	7·16	...	...	3	·01	...	...	...	...	...	...
52	·11	4,627	10·00	...	...	4	0·1	2	·004	...	...	...	...
32	·13	1,896	7·76	...	...	...	...	...	...	...	...	1	·004
422	·13	23,893	7·49	...	...	8	·003	5	·002	2	·0006	1	·0003
25	·10	86	·35	...	...	18	·07	...	...	6	·03	27	·11
...	...	29	4·64	...	...	...	...	...	...	...	...	...	...
...	...	5	2·50	...	...	...	...	...	...	...	...	...	...
8	·83	36	3·74	...	...	...	...	...	...	...	...	...	...
...	...	9	6·51	...	...	...	...	...	...	...	...	...	...
330	3·44	45	·47	...	...	5	·05	...	...	1	·01	4	·04
...	...	14	3·09	...	...	...	...	...	...	...	...	...	...
...	...	44	6·02	...	...	...	...	...	...	...	...	...	...

ANNUAL FORM

1	2				14		15		16		
No.	Districts and Towns.				Pneu- monia.		Phthisis.		Other Respi- ratory Diseases.		
					Deaths.	Ratio.	Deaths.	Ratio.	Deaths.	Ratio.	
A.—DISTRICTS.											
1	Karachi	...	...	...	930	2·99	69	·22	79	·25
2	Hyderabad	...	...	...	751	1·41	89	·17	216	·42
3	Nawabshah	...	...	...	398	·85	63	·14	84	·17
4	Thar Parkar	...	...	...	890	1·95	85	·19	156	·34
5	Larkana	...	...	...	31	·08	45	·11	31	·08
6	Dadu	...	...	...	114	·37	55	·18	87	·28
7	Sukkur	...	...	...	75	·16	29	·06	61	·13
8	Upper Sind Frontier	...	...	...	19	·07	10	04	3	·01
Total of the Districts (excluding towns) ...					3,208	1·005	445	·13	717	·22	
B.—TOWNS.											
KARACHI DISTRICT.											
9	Karachi	...	...	T. C.	1,565	6·31	575	2·32	549	2·21
10	Karachi	...	...	C. C.	10	1·60	...	...	3	·48
11	Drigh Road	...	...	C. C.	...	...	...	...	...	...
12	Tatta	...	...	T. C.	24	2·49	8	·83	7	·73
13	Ketibundar	...	...	C. C.	4	2·40	3	1·80	1	·60
HYDERABAD DISTRICT.											
14	Hyderabad	...	...	T. C.	571	5·95	220	2·29	126	1·32
15	Hyderabad	...	...	C. C.	5	1·11	...	...	...	...
16	Hala	...	...	T. C.	10	1·37	3	·41	1	·14

No VI (a).—*contd.*

17		18		19	20			21	22
Dysentery.		Diarrhœa.		Deaths from child-birth.	Deaths under 1 year.			Infant mortality rate per 1,000 births.	No.
Deaths.	Ratio.	Deaths.	Ratio.		Male.	Female.	Total.		
7	·02	4	·01	32	227	199	426	126·89	1
6	·01	12	·02	82	327	255	582	107·06	2
8	·02	14	·03	110	316	276	592	84·07	3
6	·01	50	·11	74	363	304	667	94·21	4
4	·01	2	·005	91	469	344	813	86·51	5
11	·04	4	·01	80	261	180	451	82·57	6
4	·01	7	·02	113	569	470	1,039	115·87	7
2	·008	6	·03	23	176	120	296	80·30	8
48	·01	99	·03	605	2,708	2,158	4,866	96·49	
117	·47	535	2·16	93	1,076	898	1,974	149·40	9
4	·64	3	·43	1	21	11	32	85·08	10
...	...	...	...	...	1	1	2	65·45	11
2	·21	...	...	1	19	11	30	243·90	12
3	1·80	1	·60	...	4	3	7	166·66	13
52	·54	68	·71	58	461	376	837	205·14	14
...	...	...	...	...	4	...	4	72·72	15
...	...	...	...	3	12	6	18	148·76	16

ANNUAL FORM

1	2				3	4		5		6		
No.	District and Towns.				Population according to Census of 1931.	Enteric Fever.		Measles.		Cerebro-spinal Fever.		
						Deaths.	Ratio.	Deaths.	Ratio.	Deaths.	Ratio.	
B.—TOWNS.— <i>contd.</i>												
HYDERABAD DISTRICT.— <i>contd.</i>												
17	Matiari	...	...	T. C.	...	6,692	...	...	...	...	...	...
18	Tando Muhammadkhan	...	...	T. C.	...	6,626	...	...	...	...	...	...
19	Nasarpur	...	...	T. C.	...	4,254	2	·47	...	...	...	...
20	Tando Allahyar	...	...	T. C.	...	5,146	...	...	...	...	...	...
NAWABSHAH DISTRICT.												
21	Nawabshah	...	...	T. C.	...	7,023	7	·09	1	·14	...	...
22	Tando Adam	...	...	T. C.	...	13,469	6	·44	...	...	...	...
23	Shahdadpur	...	...	T. C.	...	8,847	3	·34	...	...	...	...
THAR PARKAR DISTRICT.												
23	Mirpurkhas	...	...	T. C.	...	10,178	1	·10	...	...	...	...
24	Umarkot	...	...	T. C.	...	3,841	1	·26	...	...	...	...
LARKANA DISTRICT.												
25	Larkana	...	...	T. C.	...	26,841	45	1·68	33	1·23	...	...
26	Kambar	...	...	T. C.	...	9,717	1	·10	3	·31	...	...
27	Ratodero	...	...	T. C.	...	7,285	...	...	4	·54	1	·14
DADU DISTRICT.												
28	Dadu	...	...	T. C.	...	6,562	2	·30	...	...	...	...
29	Kotri	...	...	T. C.	...	10,033	2	·20	...	...	...	...
30	Sehwan	...	...	T. C.	...	5,795	3	·52	1	·17	...	...
31	Manjhand	...	...	T. C.	...	2,746	1	·36	...	...	...	...

NO. VI (a).—*contd.*

[illegible]

ANNUAL FORM

1	2	14	15	16			
No.	Districts and Towns.	Pneumonia.	Phthisis.	Other Respi- ratory. Diseases.			
		Deaths.	Ratio.	Deaths.	Ratio.		
TOWNS,— <i>contd.</i>							
HYDERABAD DISTRICT.— <i>contd.</i>							
17	Matiari ... T. C. ...	12	1·79	12	1·79	1	·15
18	Tando Muhammadkhan ... T. C. ...	24	3·62	7	1·06	1	·15
19	Nasarpur ... T. C. ...	23	5·41	1	·23	4	·94
20	Tando Allahyar ... T. C. ...	10	1·91	2	·39	1	·19
NAWABSHAH DISTRICT.							
21	Nawabshah ... T. C. ...	12	1·71	8	1·14	1	
22	Tando Adam ... T. C. ...	19	1·47	16	1·19	5	
23	Shahdadpur ... T. C. ...	8	·90	7	·79	2	
THAR PARKAR DISTRICT.							
24	Mirpurkhas ... T. C. ...	91	8·94	18	1·76	2	·20
25	Umarkot ... T. C. ...	10	2·63	2	·52	...	...
LARKANA DISTRICT.							
26	Larkana ... T. C. ...	45	1·68	19	·71	22	·82
27	Kambar ... T. C. ...	2	·20	4	·41	1	·10
28	Ratodero ... T. C. ...	...	...	...	..	...	...
DADU DISTRICT.							
29	Dadu ... T. C. ...	2	·30	2	·30	1	·16
30	Kotri ... T. C. ...	21	2·09	7	·70	1	·10
31	Sehwan ... T. C. ...	8	1·39	...	...	1	·17
32	Manjhand ... T. C. ..	4	1·46	...	...	1	·36

No. VI (a) —concl'd.

17		18		19	20			21	22
Dysentery.		Diarrhœa.		Deaths from child-birth	Deaths under 1 year.			Infant mortality rate. per 1000 births.	No
Deaths.	Ratio.	Deaths.	Ratio.		Male.	Female.	Total.		
...	...	...	...	5	4	5	9	101·12	17
3	·45	...	...	5	6	9	15	253·00	18
...	...	1	·23	...	7	2	9	147·54	19
1	·19	...	...	9	6	7	13	228·07	20
...	...	...	...	7	21	14	35	625·00	21
1	·07	5	·36	18	15	11	26	107·88	22
...	...	...	...	9	6	10	16	135·59	23
...	...	2	·20	1	10	7	17	160·38	24
...	...	...	...	6	2	4	6	92·18	25
3	·11	4	·15	22	102	74	176	180·75	26
...	...	...	...	5	11	10	21	100·48	27
1	·14	...	...	3	16	19	35	169·90	28
...	...	...	...	3	6	7	13	228·07	28
3	·30	4	·40	1	10	9	19	137·68	30
...	...	...	...	1	6	1	7	112·90	31
...	...	1	·36	...	3	2	5	61·73	32

ANNUAL FORM

1 No.	2 Districts and Towns.				3 Population according to Census of 1931.	4 Enteric Fever.		5 Measles.		6 Cerebro- spinal Fever.	
						Deaths.	Ratio.	Deaths.	Ratio.	Deaths.	Ratio.
	B.—TOWNS.— <i>concl'd.</i>										
	SUKKUR DISTRICT.										
32	Sukkur ...	...	...	T. C. ...	69,277	31	·45	3	·05	...	...
33	Shikarpur	...	...	T. C. ...	62,505	16	·27	65	1·04	...	...
34	Rohri ...	...	...	T. C. ...	16,900	2	·12	...	...	...	...
35	Garhi Yasin	...	...	T. C. ...	7,370	3	·41	11	1·94	...	...
36	Ghotki	...	...	T. C. ...	4,826	6	1·24	4	·83	...	...
	UPPER SIND FRONTIER DISTRICT.										
37	Jacobabad	...	...	T. C. ...	15,748	1	·06	...	...	...	...
	Total of Towns ...				6,86,857	218	·31	186	·27	11	·02
	Total of the Province ...				38,76,388	371	·09	355	·09	15	·004

No. VI (a)—*concl'd.*

7		8		9		10		11		12		13	
Malaria.		Other Fevers.		Influenza.		Diphtheria.		Chicken-pox.		Whooping Cough.		Cancer.	
Deaths.	Ratio.	Deaths.	Ratio.	Deaths.	Ratio.	Deaths.	Ratio.	Deaths.	Ratio.	Deaths.	Ratio.	Deaths.	Ratio.
77	1·11	54	·78	...	...	...	...	...	...	1	·01	...	...
362	5·78	...	...	...	...	...	...	...	...	2	·03	...	...
89	5·27	...	...	...	...	...	...	...	...	...	...	...	...
1	·14	89	12·07	...	...	...	...	...	...	...	...	...	...
32	6·63	71	14·71	...	...	2	·41	...	...	...	...	...	...
...	...	76	4·83	...	...	...	...	...	...	...	...	...	...
1,092	1·58	1,262	1·83	...	...	28	·04	1	·001	11	·02	34	·05
1,514	·39	25,155	6·48	...	...	36	·009	6	·002	13	·003	35	·009

ANNUAL FORM

1 No.	1 Name of Town.	14 Pneumonia.		15 Phthisis.		16 Other Respi- ratory Diseases.	
		Deaths.	Ratio.	Deaths.	Ratio.	Deaths.	Ratio.
	B.--TOWNS.—concl'd.						
	SUKKUR DISTRICT.						
33	Sukkur T. C. ...	104	1·50	47	·68	188	2·71
34	Shikarpur T. C. ...	38	·61	56	·90	51	·82
35	Rohri T. C. ...	13	·77	7	·41	14	·83
36	Garhi Yasin T. C. ...	2	·27	21	2·85	5	·68
37	Ghotki T. C. ...	6	1·24	14	2·90	6	1·24
	UPPER SIND FRONTIER DISTRICT.						
38	Jacobabad T. C. ...	16	1·02	2	·12	...	...
	Total of Town ...	2,659	3·87	1,061	1·54	995	1·44
	Total of the Provinces ...	5,867	1·51	1,506	·38	1,712	·44

No. VI (a)—*concl'd.*

17 Dysentery.		18 Diarrhoea.		19 Deaths from child-birth.	20 Deaths under 1 year.			21 Infant mortality rate per 1,000 births.	22 No.
Deaths.	Ratio.	Deaths.	Ratio.		Male.	Female.	Total.		
61	·88	115	1·65	32	156	133	289	111·75	33
12	·19	12	·19	44	215	228	443	208·96	34
1	·06	3	·18	3	26	18	44	138·36	35
...	...	...	...	6	28	18	46	204·80	36
3	·63	8	1·65	9	47	45	92	383·33	37
1	·06	...	...	5	15	13	28	154·69	38
268	·39	762	1·11	350	2,316	1,952	4,268	158·32	
316	·08	861	·22	955	5,024	4,110	9,134	118·02	

Deaths registered from cholera in the districts

1 No.	2 Districts.	3 Circles of Registration.		4 Villages.							
		Number in each district.	Number from which deaths from cholera were reported.	Number in each district.	Number from which deaths from cholera were reported.	January.	February.	March.	April.	May.	June.
1	Karachi ...	14	...	1,041	...	...	...	...	..	...	...
2	Hyderabad ...	14	...	870	...	...	...	...	...	...	...
3	Nawabshah ...	10	1	734	1	...	...	...	...	...	...
4	Thar Parkar ...	13	...	948	...	...	...	...	...	...	...
5	Larkana ...	10	...	2,118	...	...	...	...	...	...	...
6	Dadu ...	11	...	1,047	...	...	...	...	...	...	...
7	Sukkur ...	13	1	685	1	...	...	...	...	...	...
8	Upper Sind Frontier...	6	...	1,652	...	...	...	...	...	...	...
	Total of the Province ..	91	2	9,095	2	...	...	...	...	...	...

No. VII.

of the Province of Sind, during each month of the year 1937.

5						6			7			8	9
July.	August	September.	October.	November.	December.	Total.			Ratio of deaths per 1,000 of population.			Mean ratio per 1,000 of previous five years.	No.
						Male.	Female.	Total.	Male.	Female.	Total.		
...	...	...	...	...	...	...	...	...	...	...	...	...	1
...	...	...	...	...	...	...	...	...	...	...	...	·003	2
...	1	...	...	...	..	...	1	1	...	·004	·002	·0008	3
...	...	...	...	...	...	...	...	...	...	..	...	·002	4
...	...	...	...	...	...	...	...	...	...	...	...	·007	5
...	...	...	...	...	...	...	...	...	...	...	...	·0006	6
...	1	...	...	...	...	1	...	1	·002	...	·002	·01	7
...	...	...	...	...	...	...	..	...	...	...	...	...	8
...	2	...	...	...	...	1	1	2	·0004	·0005	·0005	·004	

Deaths registered from small-pox in the districts of the

1	2	3		4							
No.	Districts.	Circles of Registration.		Villages.		January.	February.	March.	April.	May.	June.
		Number in each district.	Number from which deaths from small-pox were reported.	Number in each district.	Number from which deaths from small-pox were reported.						
1	Karachi ...	14	6	1,041	6	8	10	16	25	11	2
2	Hyderabad ...	14	5	870	3	...	...	...	9	7	1
3	Nawabshah ...	10	5	734	13	1	...	7	5	14	1
4	Thar Parkar ...	13	3	948	10	4	5	1	2	...	2
5	Larkana ...	10	9	2,118	70	3	3	4	15	43	43
6	Dadu ...	11	7	1,047	17	...	4	1	7	5	8
7	Sukkur ...	13	12	685	39	6	1	3	17	18	8
8	Upper Sind Frontier...	6	5	1,652	25	16	13	4	7	14	1
Total for the Province...		91	52	9,095	185	38	36	36	87	112	66

No. VIII.

Province of Sind during each month of the year 1937.

5						6			7		8			9	10
July.	August.	September.	October.	November.	December.	Total.			Number of these deaths among children.		Total ratio of deaths per 1,000 of population.			Mean ratio per 1,000 for previous five years.	No.
						Male.	Female.	Total.	Under 1 year.	Under 10 years.	Male.	Female.	Total.		
...	...	...	...	2	1	48	27	75	15	18	·15	·11	·13	·27	1
1	1	...	...	...	...	16	3	19	...	2	·04	·01	·03	·25	2
1	1	5	4	1	6	32	14	46	10	30	·11	·07	·09	·18	3
6	6	...	...	4	21	32	19	51	6	31	·12	·09	·11	·15	4
38	35	7	9	3	32	97	138	235	32	161	·39	·68	·53	·19	5
3	1	6	4	..	30	38	31	69	7	31	·21	·21	·21	·19	6
18	16	29	8	48	37	100	109	209	44	78	·28	·39	·34	·14	7
14	7	10	...	...	8	44	50	94	14	50	·30	·43	·36	·11	8
81	67	57	25	58	135	407	391	798	128	401	·18	·22	·21	·19	

ANNUAL FORM

Deaths registered from plague in the districts of the

1	2	3		4							
o.	Districts.	Circles of Registration.		Villages.		January.	February.	March.	April.	May.	June.
		Number in each district.	Number from which deaths from plague were reported.	Number in each district.	Number from which deaths from plague were reported.						
1	Karachi	14	3	1,041	3	...	3	3	5	1	...
2	Hyderabad	14	...	870	...	...	...	...	...	...	...
3	Nawabshah	10	...	734	...	...	...	...	...	...	..
4	Thar Parkar	13	...	948	...	...	...	...	...	...	...
5	Larkana	10	...	2,118	...	...	...	...	...	...	...
6	Dadu	11	...	1,047	...	...	...	...	...	...	...
7	Sukkur	13	...	685	...	...	...	...	...	...	...
8	Upper Sind Frontier ...	6	...	1,652	...	...	..	...	...	...	...
Total for the Province .		91	3	9,095	3	...	3	3	5	1	...

No. IX.

Province of Sind during each month of the year 1937.

5						6			7			8	9
July.	August.	September.	October.	November.	December.	Total.			Ratio of deaths per 1,000 of population.			Mean ratio per 1,000 of previous five years.	No.
						Male.	Female.	Total.	Male.	Female.	Total.		
...	..	4	13	3	16	·03	·05	·03	·001	1
...	2
...	3
...	4
...	5
...	6
...	7
...	8
...	...	4	13	3	16	·005	·001	·004	·0003	

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ANNUAL FORM

Deaths registered from Fevers in the districts of the

1	2	3		4							
No.	Districts.	Circles of Registration.		Villages.		January.	February.	March.	April.	May.	June.
		Number in each district.	Number from which deaths from fevers were reported.	Number in each district.	Number from which deaths from fevers were reported.						
1	Karachi ...	14	14	1,041	609	244	171	160	132	103	108
2	Hyderabad ...	14	14	870	870	473	400	348	288	274	238
3	Nawabshah ...	10	10	734	734	602	422	355	339	271	239
4	Thar Parkar ...	13	13	948	948	442	464	443	438	334	271
5	Larkana ...	10	10	2,118	1,023	500	369	409	300	336	231
6	Dadu ...	11	11	1,047	574	316	255	225	205	218	168
7	Sukkur ...	13	13	685	685	645	553	514	428	446	359
8	Upper Sind Frontier ...	6	6	1,652	555	171	226	167	150	182	134
	Total for the Province.	91	91	9,095	5,993	3,393	2,860	2,621	2,280	2,164	1,748

No. X.

Province of Sind during each month of the year 1937.

5						6			7			8	9
July.	August.	September.	October.	November.	December.	Total,			Ratio of deaths per 1,000 of population.			Mean ratio per 1,000 of previous five years.	No.
						Male.	Female.	Total.	Male.	Female.	Total.		
108	121	105	163	190	142	993	754	1,747	3·02	3·01	3·02	4·47	1
262	261	280	255	268	326	2,104	1,569	3,673	5·67	5·36	5·55	6·65	2
235	239	214	226	250	313	2,146	1,559	3,705	7·54	7·39	7·45	8·77	3
250	206	196	311	318	299	2,322	1,650	3,972	·88	8·01	8·45	9·04	4
266	279	302	393	434	365	2,325	1,859	4,184	9·29	9·24	9·24	10·94	5
171	146	150	165	192	222	1,363	1,070	2,433	7·26	7·27	7·28	9·02	6
362	402	364	440	580	576	3,132	2,537	5,669	8·96	9·24	9·08	11·28	7
118	140	136	228	189	186	1,162	865	2,027	7·98	7·53	7·78	8·55	8
1,772	1,794	1,747	2,181	2,421	2,429	15,547	11,863	27,410	7·16	6·96	7·07	8·46	

ANNUAL FORM

Deaths registered from Dysentery and Diarrhoea diseases in districts

1	2			3		4							
No.	Districts.			Circles of Registration,		Villages.		January.	February.	March.	April.	May.	June.
				Number in each District.	Number from which deaths from Dysentery and Diarrhoea were reported.	Number in each District.	Number from which deaths from Dysentery and Diarrhoea were reported.						
1	Karachi	...	...	14	10	1,041	10	27	33	40	58	56	67
2	Hyderabad	...	...	14	10	870	11	18	11	4	6	8	11
3	Nawabshah	...	...	10	8	734	18	5	3	1	3	1	2
4	Thar Parkar	...	...	13	10	948	40	...	1	7	5	3	7
5	Larkana	...	...	10	5	2,118	5	2	1	...	1	1	...
6	Dadu	...	...	11	8	1,047	6	2	2	...	1	2	4
7	Sukkur	...	...	13	9	685	7	20	5	19	16	20	18
8	Upper Sind Frontier	...	...	6	4	1,652	6	1	1	...	1	2	...
	Total of the Province	...	...	91	64	9,095	103	75	57	71	92	93	109

No. XI.

of the Province of Sind during each month of the year 1937.

5						6			7			8	9
July.	August.	September.	October.	November.	December.	Total.			Ratio of deaths per 1,000 of Population,			Mean ratio per 1,000 of previous five years.	No.
						Male.	Female.	Total.	Male.	Female.	Total.		
67	113	102	52	34	27	385	291	676	1·17	1·12	1·16	1·05	1
7	27	20	5	15	11	88	55	143	·23	·18	·21	·24	2
1	...	3	4	5	...	22	6	28	·07	·02	·06	·05	3
6	9	3	3	12	2	33	25	58	·12	·12	·13	·06	4
1	...	...	6	2	...	8	6	14	·03	·02	·03	·04	5
4	2	3	...	...	3	11	12	23	·05	·08	·07	·06	6
13	14	18	25	27	31	121	105	226	·34	·38	·36	·22	7
...	...	1	1	1	...	7	2	9	·04	·02	·03	·03	8
99	165	150	96	96	74	675	502	1,177	·39	·28	·30	·29	

ANNUAL FORM

Deaths registered from Respiratory diseases in the Districts of the

1	2			3		4							
No.	Districts.			Circles of Registration.		Villages.		January.	February.	March.	April.	May.	June.
				Number in each District.	Number from which deaths from Respiratory diseases were reported.	Number in each District.	Number from which deaths from Respiratory diseases were reported.						
1	Karachi	...	...	14	13	1,041	410	510	538	373	325	287	195
2	Hyderabad	...	...	14	14	870	329	350	369	289	215	116	49
3	Nawabshah	...	...	10	10	734	217	143	118	95	55	45	24
4	Thar Parkar	...	...	13	13	948	412	284	211	228	132	77	41
5	Larkana	...	...	10	9	2,118	52	30	26	26	10	18	6
6	Dadu	...	...	11	11	1,047	170	65	50	42	38	32	1
7	Sukkur	...	...	13	13	685	58	118	97	81	64	53	52
8	Upper Sind Frontier	...	...	6	6	1,652	22	7	5	10	4	4	3
	Total of the Province	...	...	91	89	9,095	1,670	1,497	1,414	1,144	843	632	401

No. XII.

Province of Sind during each month of the year 1937.

5						6			7			8	9
July.	August.	September.	October.	November.	December.	Total.			Ratio of deaths per 1,000 of Population.			Mean ratio per 1,000 of previous five years.	No.
						Male.	Female.	Total.	Male.	Female	Total.		
263	265	226	228	264	359	2,142	1,691	3,833	6.51	6.74	6.61	6.03	1
82	84	68	94	137	208	1,318	773	2,091	3.55	2.66	3.	2.94	2
34	23	13	15	28	42	391	234	625	1.40	1.08	1.26	.98	3
40	40	27	42	59	74	804	451	1,255	3.07	4.12	2.65	2.61	4
8	7	8	13	21	27	117	83	200	.46	.41	.44	.45	5
7	9	8	10	20	22	192	112	304	1.03	.77	.91	.89	6
29	35	36	40	67	68	441	299	740	1.25	1.08	1.19	1.22	7
1	2	2	1	4	7	37	13	50	.26	.11	.21	.30	8
464	465	388	443	600	807	5,442	3,656	9,098	2.49	2.15	2.35	2.19	

APPENDIX
STATEMENT
Showing the Particulars of Vaccination

No.	Districts and Towns.						Population according to census of 1931.	Average population per square mile.	Average number of Vaccinators employed throughout the year.
1	2						3	4	5
1	Karachi	...	...	...	...	T. C.	2,54,031	...	6
2	Do.	...	...	...	...	C. C.	...	...	1
3	Do.	...	...	...	...	R. C.	46,748	...	1
4	Tatta	...	...	...	...	"	41,020	}	1
5	Do.	...	...	...	...	T. C.	9,635		
6	Ketibandar	...	...	...	...	"	}	}	1
7	Ghorabari	...	...	...	...	R. C.			
8	Mirpur Sakro	...	...	...	...	"	34,356	...	1
9	Sujawal	...	...	...	...	"	37,946	...	1
10	Jati	...	...	...	...	"	34,651	...	1
11	Shahbandar	...	...	...	...	"	39,890	...	1
12	Mirpur Bathoro	...	...	...	...	"	42,826	...	1
Total, Karachi district							5,79,079	...	15
13	Hyderabad	...	...	...	...	T. C.	96,021	...	1
14	Do.	...	...	...	...	C. C.	4,530	...	1
15	Do.	...	...	...	...	R. C.	79,096	...	1
16	Hala	...	...	...	...	"	}	}	2
17	Do.	...	...	...	...	T. C.			
18	Matiaruin	...	...	...	...	"	}	}	1
19	Nasarpur	...	...	...	...	"
20	Tando Allahyar	...	...	...	...	"	}	}	1
21	Do	...	...	...	...	R. C.			
22	Tando Muhammadkhan	...	...	...	...	T. C.	}	}	2
23	Guni	...	...	...	...	R. C.			
24	Tando Bago	...	...	...	...	"	67,998	...	1
25	Badin	...	...	...	...	"	89,280	...	2
26	Dero Mohabat	...	...	...	...	"	46,638	...	1
Total, Hyderabad district							6,62,924	...	12
27	Tando Adam	...	...	...	...	T. C.	}	}	2
28	Shahdadpur	...	...	...	...	"
29	Do.	...	...	...	...	R. C.			

IV.

No. I.

in Sind during the Year 1937-38.

Total number of persons vaccinated.			Average number of persons vaccinated by each Vaccinator.	Primary Vaccination.				
				Total.	Successful.			Unknown.
Male.	Female.	Total.			Under one year.	One and under six years.	Total of all ages.	
6	7	8	9	10	11	12	13	14
{ P. 8,459	7,651	16,110	5,845	16,137	10,069	4,001	15,381	612
{ R. 13,045	5,913	18,958						
{ P. 73	47	120	402	120	49	35	84	4
{ R. 218	64	282						
{ P. 548	549	1,097	1,677	1,097	298	706	1,071	26
{ R. 455	125	580						
{ P. 967	698	1,665	2,201	1,665	432	948	1,527	138
{ R. 239	47	286						
{ P. 110	102	212		212	70	97	182	30
{ R. 22	16	38						
{ P. 41	31	72		72	13	47	65	3
{ R. 5	...	5						
{ P. 505	228	733	857	733	121	582	726	7
{ R. 42	5	47						
{ P. 462	401	863	1,140	863	413	367	821	42
{ R. 217	60	277						
{ P. 419	358	777	852	777	273	426	759	18
{ R. 70	5	75						
{ P. 383	327	710	810	710	279	371	694	16
{ R. 94	6	100						
{ P. 438	388	826	840	826	303	406	781	45
{ R. 14	...	14						
{ P. 753	591	1,344	1,590	1,344	230	878	1,296	48
{ R. 222	24	246						
{ P. 13,158	11,371	24,529	3,029	24,556	12,550	8,864	23,387	989
{ R. 14,643	6,265	20,908						
{ P. 1,969	1,739	3,708	6,647	3,711	1,600	1,391	3,003	695
{ R. 1,839	1 100	2,939						
{ P. 45	33	78	97	78	35	38	77	1
{ R. 18	1	19						
{ P. 1,034	794	1,828	2,216	1,828	752	861	1,622	206
{ R. 312	76	388						
{ P. 1,649	1,257	2,906	1,818	2,906	1,173	1,516	2,783	123
{ R. 270	56	326						
{ P. 95	97	192		192	115	72	188	4
{ R. 3	...	3						
{ P. 82	71	153		153	45	101	150	3
{ R. 52	3	55						
{ P. 69	50	119		119	21	83	117	2
{ R. 148	5	153						
{ P. 58	46	104	1,319	104	25	67	98	6
{ R. 71	...	71						
{ P. 384	369	753		753	275	439	729	24
{ R. 107	12	119						
{ P. 84	72	156		156	49	81	142	14
{ R. 78	9	87	1,707					
{ P. 1,718	1,201	2,919		2,919	1,272	1,349	2,700	219
{ R. 216	36	252						
{ P. 757	631	1,388	1,862	1,388	556	695	1,329	59
{ R. 409	65	474						
{ P. 1,552	1,199	2,751	1,524	2,751	844	1,670	2,633	118
{ R. 286	10	296						
{ P. 1,044	798	1,842	2,141	1,842	700	873	1,652	190
{ R. 227	72	299						
{ P. 10,540	8,357	18,897	2,032	18,900	7,462	9,236	17,223	1,664
{ R. 4,036	1,445	5,481						
{ P. 252	230	482	...	482	236	211	466	16
{ R. 57	14	71						
{ P. 134	96	230	1,763	230	89	113	211	19
{ R. 2	1	3						
{ P. 1,405	1,205	2,610	...	2,610	1,303	1,052	2,407	203
{ R. 117	12	129						

No.	Districts or Towns.						Re-vaccination.		
							Total.	Successful.	Unknown.
1	2						15	16	17
1	Karachi	...	...	...	T. C.	...	18,958	...	18,598
2	Do.	...	...	...	C. C	...	282	74	2
3	Do.	...	...	...	R. C.	...	580	11	89
4	Tatta	...	...	...	R. C.	...	286	23	153
5	Do.	...	...	...	T. C.	...	38	3	27
6	Ketibandar	...	...	...	T. C.	...	5	...	...
7	Ghorabari	...	...	...	R. C.	...	47	6	...
8	Mirpur Sakro	...	...	...	"	...	277	79	149
9	Sujawal	...	...	...	"	...	75	5	3
10	Jati	...	...	...	"	...	100	38	18
11	Shahbundar	...	...	...	"	...	14	3	2
12	Mirpur Bathoro	...	...	...	"	...	246	58	74
Total, Karachi district							20,908	300	19,475
13	Hyderabad	...	...	...	T. C.	...	2,939	214	664
14	Do.	...	...	...	C. C.	...	19	17	2
15	Do.	...	...	...	R. C.	...	388	32	99
16	Hala	...	...	...	"	...	326	38	19
17	Do.	...	...	...	T. C.	...	3	...	...
18	Matiaruin	...	...	...	"	...	55	...	...
19	Nasarpur	...	...	...	"	...	153	5	45
20	Tando Allahyar	...	...	...	"	...	71	...	13
21	Do.	...	...	...	R. C.	...	119	...	33
22	Tando Muhammadkhan	...	...	...	T. C.	...	87	4	55
23	Guni	...	...	...	R. C.	...	252	17	96
24	Tando Bago	...	...	...	"	...	474	17	28
25	Badin	...	...	...	"	...	296	58	162
26	Dero Mohbat	...	...	...	"	...	299	25	36
Total, Hyderabad district							5,481	427	1,252
27	Tando Adam	...	...	...	T. C.	...	71	22	21
28	Shahdadpur	...	...	...	"	...	3	...	...
29	Do.	...	...	...	R. C.	...	129	19	53

Percentage of successful cases in which the results were known		Persons successfully vaccinated per 1,000 of population.	Total cost of Vaccination Department.	Number of all successful vaccinations and re-vaccinations performed by the vaccination staff only.	Average cost of each successful case performed by the vaccination staff.
Primary.	Re-vaccination.				
18	19	20	21	22	23
			Rs. a. p.		Rs. a. p.
99·25	...	6·55	...	...	...
72·41	26·43	...	...	...	...
100·00	2·24	23·15	...	...	...
100·00	17·29	37·79	...	...	...
100·00	27·27	19·20	...	...	...
94·21	...	}	...	...	...
100·00	12·77		...	...	...
100·00	61·72	26·20	...	...	...
100·00	69·45	20·13	...	...	...
100·00	46·34	21·12	...	...	...
100·00	25·00	19·66	...	...	...
100·00	33·61	31·62	...	...	...
99·35	21·07	40·95	18,006—12—2	23,687	0—12—2
99·67	9·41	33·50	...	...	...
100·00	100·00	20·75	...	...	...
100·00	11·07	20·91	...	...	...
100·00	12·38	}	...	...	...
100·00	...		...	...	...
100·00	...	}	...	...	...
100·00	4·63		...	...	...
100·00	...	}	...	...	...
100·00	...		...	...	...
100·00	12·50	}	...	...	...
100·00	6·64		...	...	...
100·00	3·81	19·79	...	...	...
100·00	43·28	30·14	...	...	...
100·00	9·50	35·96	...	...	...
99·99	10·09	26·62	13,516—7—7	17,650	0—12—3
100·00	44·00	...	...	...	...
100·00	...	30·28	...	...	...
100·00	25·00	...	...	...	...

STATEMENT

No.	Districts and Towns.						Population of according to census of 1931.	Average population per square mile.	Average number of Vaccinators employed throughout the year.
1	2						3	4	5
30	Kandiaro	...	...	...	R. C.	...	86,068	...	1
31	Naushahro Feroze	...	...	...	"	...	80,814	...	2
32	Sakrand	...	...	...	"	...	62,476	...	1
33	Moro	...	...	...	"	...	59,563	...	1
34	Nawabshah	...	...	...	"	...	56,270	...	1
35	Sinjhero	...	...	...	"	...	48,204	...	1
	Total, Nawabshah district						4,96,612	...	9
36	Mirpurkhas	...	...	...	R. C.	...	47,536	...	1
37	Do.	...	...	...	T. C.	...			
38	Umarkot	...	...	...	"	...	3,841	...	1
39	Do.	...	...	...	R. C.	...	39,628	...	
40	Samaro	...	...	...	"	...	43,779	...	1
41	Jamesabad	...	...	...	"	...	30,745	...	1
42	Chachro	...	...	...	"	...	61,974	...	1
43	Nagar Parkar	...	...	...	"	...	41,726	...	1
44	Diplo	...	...	...	"	...	25,242	...	1
45	Mithi	...	...	...	"	...	45,709	...	1
46	Khipro	...	...	...	"	...	51,030	...	2
47	Sanghar	...	...	...	"	...	33,777	...	1
48	Dighri	...	...	...	"	...	43,053	...	1
	Total, Thar Parkar district						4,68,040	...	12
49	Dadu	...	...	...	T. C.	...	57,549	...	1
50	Do.	...	...	...	R. C.	...			
51	Sehwan	...	...	...	"	...	45,086	...	1
52	Do.	...	...	...	T. C.	...			
53	Kotri	...	...	...	"	...	53,787	...	1
54	Do.	...	...	...	R. C.	...			
55	Manjhand	...	...	...	T. C.	...	...	...	...
56	Johi	...	...	...	R. C.	...	51,448	...	1
57	Kakar	...	...	...	"	...	48,448	...	1
58	Mehar	...	...	...	"	...	63,001	...	1
59	Kohistan	...	...	...	"	...	17,374	...	1
	Total, Dadu district						3,36,693	...	7

No. I.—*contd.*

Total number of persons vaccinated.			Average number of persons vaccinated by each Vaccinator.	Primary Vaccination.				
				Total.	Successful.			Unknown.
					Under one year.	One and under six years.	Total of all ages.	
Male.	Female.	Total.						
6	7	8	9	10	11	12	13	14
{ P. 1,823	1,625	3,448	4,684	3,443	1,560	1,272	2,923	523
{ R. 1,015	221	1,236						
{ P. 1,652	1,431	3,083	2,035	3,083	1,788	934	2,806	276
{ R. 786	200	986						
{ P. 966	816	1,782	2,030	1,782	1,019	667	1,710	72
{ R. 220	28	248						
{ P. 966	887	1,853	2,400	1,853	965	755	1,770	79
{ R. 468	79	547						
{ P. 1,016	829	1,845	2,317	1,845	838	730	1,702	143
{ R. 370	102	472						
{ P. 857	709	1,566	1,819	1,566	680	714	1,406	160
{ R. 237	16	253						
{ P. 9,071	7,828	16,899	2,316	16,889	8,478	6,448	15,401	1,491
{ R. 3,272	673	3,945						
{ P. 549	416	965	2,016	965	593	282	944	21
{ R. 50	40	90						
{ P. 174	185	359	1,334	359	161	154	350	9
{ R. 509	93	602						
{ P. 45	46	91	1,920	92	47	31	78	12
{ R. 69	...	69						
{ P. 557	413	970	1,414	970	342	546	912	58
{ R. 165	39	204						
{ P. 788	638	1,426	1,920	1,426	511	805	1,370	56
{ R. 424	70	494						
{ P. 607	474	1,081	1,414	1,081	535	453	1,026	55
{ R. 286	47	333						
{ P. 1,428	1,160	2,588	4,678	2,588	1,069	1,286	2,523	75
{ R. 1,531	559	2,090						
{ P. 962	759	1,721	3,223	1,721	505	1,013	1,614	107
{ K. 999	503	1,502						
{ P. 480	423	903	1,286	903	304	492	812	80
{ R. 343	40	383						
{ P. 798	649	1,447	2,281	1,447	427	895	1,366	81
{ R. 679	155	384						
{ P. 1,219	918	2,137	1,186	2,137	1,042	937	2,047	90
{ R. 217	17	234						
{ P. 573	487	1,060	1,202	1,060	563	397	988	72
{ R. 138	4	142						
{ P. 884	706	1,590	2,248	1,590	784	612	1,475	115
{ R. 561	97	658						
{ P. 9,064	7,274	16,338	1,998	16,339	6,883	7,903	15,495	831
{ R. 5,971	1,664	7,635						
{ P. 91	67	153	2,765	158	72	73	152	6
{ R. 403	54	457						
{ P. 767	703	1,470	2,828	1,470	791	532	1,385	79
{ R. 592	88	680						
{ P. 832	819	1,651	1,404	1,652	882	546	1,496	154
{ R. 651	335	986						
{ P. 64	66	130	...	130	53	65	123	7
{ R. 52	9	61						
{ P. 118	101	219	1,404	219	98	105	214	5
{ R. 149	19	168						
{ P. 412	259	711	...	711	258	430	693	18
{ R. 121	41	162						
{ P. 55	47	102	...	102	33	67	5102	...
{ R. 29	15	42						
{ P. 1,229	1,004	2,233	2,533	2,233	1,071	1,061	2,198	35
{ R. 225	75	300						
{ P. 845	701	1,546	1,928	1,546	847	529	1,454	92
{ R. 292	86	378						
{ P. 1,304	1,149	2,453	4,349	2,453	1,291	811	2,314	139
{ R. 1,432	464	1,896						
{ P. 404	285	589	737	589	174	303	544	45
{ R. 117	31	148						
{ P. 6,021	5,241	11,262	2,363	11,263	5,570	4,522	10,675	580
{ R. 4,063	1,215	5,278						

STATEMENT

No.	Districts and Towns,						Re-vaccination.		
							Total.	Successful.	Unknown.
1	2						15	16	17
30	Naushahro Feroze	...	...	...	R. C.	...	1,236	215	352
31	Kandiaro	...	...	...	"	..	986	238	158
32	Sakrand	...	...	...	"	...	248	14	76
33	Moro	...	...	...	"	...	547	199	172
34	Nawabshah	...	...	...	"	...	472	26	165
35	Sinjhoro	...	...	...	"	...	253	...	35
Total, Nawabshah district							3,945	733	1,032
36	Mirpurkhas	...	...	...	R. C.	..	90	28	9
37	Do.	..	...	...	T. C.	...	602	221	62
38	Umarkot	...	...	...	"	...	69	1	...
39	Do,	...	...	...	R. C.	...	204	2	...
40	Samaro	...	...	...	"	...	494	103	177
41	Jamesabad	...	...	...	"	...	333	51	248
42	Chachro	...	...	...	"	...	2,090	207	182
43	Nagar Parkar	...	...	...	"	...	1,502	...	643
44	Diplo	...	...	...	"	...	383	51	84
45	Mithi	...	...	...	"	...	834	65	336
46	Khipro	...	...	...	"	...	234	2	103
47	Sanghar	...	...	...	"	...	142	45	12
48	Dighri	...	...	...	"	...	658	167	134
Total, Thar Parkar district							7,635	943	1,990
49	Dadu	...	...	...	T. C.	...	457	1	294
50	Do.	...	...	...	R. C.	...	680	26	437
51	Sehwan	...	...	...	"	...	986	230	267
52	Do.	...	...	...	T. C.	...	61	13	25
53	Kotri	...	...	...	"	...	168	66	32
54	Do.	...	...	...	R. C.	...	162	49	32
55	Manjhand	...	...	...	T. C.	...	42	25	2
56	Johi	...	...	...	R. C.	...	300	60	74
57	Kakar	...	...	...	"	...	378	167	95
58	Mehar	...	...	...	"	...	1,896	428	336
59	Kohistan	...	...	...	"	...	148	...	...
Total, Dadu district							5,273	1,065	1,594

No. I.—*contd.*

Percentage of successful cases in which the results were known,		Persons successfully vaccinated per 1,000 of popula- tion.	Total cost of Vaccination Department.	Number of all successful vaccinations and re-vaccinations performed by the vaccination staff only,	Average cost of each successful case performed by the vaccination staff.
Primary.	Re-vaccination.				
18	19	20	21	22	23
99·93	24·32	36·46	Rs. a. p. ...	...	...
99·96	24·32	37·67	...	...	...
100·00	8·14	27·59	...	...	...
99·77	53·06	33·06	...	...	...
100·00	8·47	30·71	...	...	...
100·00	...	29·17	...	...	...
99·95	25·16	32·49	9,823—6—9	16,134	0—9—9
100·00	34·57	} 12·46	...	...	...
100·00	40·94		...	...	...
98·70	1·45	20·57	...	...	...
100·00	0·98	13·06	...	...	...
100·00	32·49	33·65	...	...	...
100·00	60·00	35·03	...	...	...
100·00	10·80	43·89	...	...	...
100·00	...	36·28	...	...	...
98·66	17·05	34·19	...	...	...
100·00	13·05	31·31	...	...	...
100·00	1·53	40·15	...	...	...
100·00	34·62	30·55	...	...	...
100·00	31·87	38·14	...	...	...
99·92	16·71	35·12	12,492—13—10	16,438	0—12—2
100·00	0·61	} 27·18	...	...	...
99·57	10·70		...	...	...
99·93	31·99	} 49·30	...	...	...
100·00	36·11		...	...	...
100·00	48·45	} 19·00	...	...	...
100·00	37·69		...	...	...
100·00	62·50	...	...	...	...
100·00	26·55	43·89	...	...	...
100·00	59·01	33·46	...	...	...
100·00	27·44	43·52	...	...	...
100·00	...	31·31	...	...	...
99·73	19·77	34·87	7,931—11—0	11,740	0—10—10

STATEMENT

No	Districts and Towns.						Population according to census of 1931.	Average population per square mile.	Average number of Vaccinators employed throughout the year.
1	2						3	4	5
60	Larkana	...	...	...	...	T. C.	26,841	...	1
61	Do.	...	...	...	...	R. C.	71,272	...	1
62	Ratodero	...	...	...	...	"	59,781	...	1
63	Do.	...	...	...	...	T. C.	...	...	...
64	Kambar	...	...	...	...	"	81,745	...	1
65	Do.	...	...	...	...	R. C.	...	...	...
66	Miro Khan	...	...	...	...	"	47,214	...	1
67	Warah	...	...	...	...	"	64,783	...	1
68	Dokri	...	...	...	...	"	76,567	...	1
69	Shahdadkot	...	...	...	...	"	37,196	...	1
Total, Larkana district							4,65,399	...	8
70	Shikarpur	...	...	...	...	T. C.	62,505	...	1
71	Do.	...	...	...	...	R. C.	73,419	...	1
72	Sukkur	...	...	...	...	"	66,350	...	1
73	Do.	...	...	...	...	T. C.	69,277	...	1
74	Rohri	...	...	...	...	"	16,900	...	1
75	Do.	...	...	...	...	R. C.	77,826	...	1
76	Garhi Yasin	...	...	...	...	"	68,674	...	1
77	Do.	...	...	...	...	T. C.			
78	Ghotki	...	...	...	...	"	46,839	...	1
79	Do.	...	...	...	...	R. C.			
80	Mirpur Mathelo	...	...	...	...	"	48,556	...	1
81	Pano Akil	...	...	...	...	"	47,287	...	1
82	Ubauro	...	...	...	...	"	46,146	...	1
Total, Sukkur district							6,23,779	...	11
83	Jacobabad	...	...	...	...	R. C.	71,561	...	1
84	Do.	...	...	...	...	T. C.	15,748	...	1
85	Garhi Khairo	...	...	...	...	R. C.	...	...	1
86	Thul	...	...	...	...	"	61,303	...	1
87	Kandhkot	...	...	...	...	"	64,525	...	1
88	Kashmor	...	...	...	...	"	41,407	...	1
Total, Upper Sind Frontier district							2,54,544	...	6
Total, Sind							38,87,070	...	80

No. I.—*contd.*

Total number of persons vaccinated.			Average number of persons vaccinated by each Vaccinator.	Primary Vaccination.				
				Total.	Successful.			Unknown.
					Under one year.	One and under six years.	Total of all ages.	
Male.	Female.	Total.						
6	7	8	9	10	11	12	13	14
{ P. 462	408	870	1.220	870	484	369	853	17
{ R. 275	75	350						
{ P. 1,356	1,087	2,443	11,377	2,443	978	900	2,010	426
{ R. 7,137	1,797	8,934						
{ P. 1,106	922	2,028	12,127	2,028	1,071	687	1,842	181
{ R. 5,944	3,591	9,535						
{ P. 111	92	203		203	135	37	174	29
{ R. 206	155	361						
{ P. 293	244	537	8,184	537	193	229	428	108
{ R. 808	123	931						
{ P. 1,422	1,198	2,620		2,620	1,192	952	2,252	365
{ R. 2,996	1,100	4,096						
{ P. 913	812	1,725	5,420	1,725	996	512	1,568	157
{ R. 2,610	1,085	3,695						
{ P. 1,201	1,017	2,218	7,387	2,218	1,110	781	1,972	232
{ R. 3,437	1,732	5,169						
{ P. 1,460	1,201	2,661	11,621	2,661	1,309	786	2,267	387
{ R. 6,382	2,578	8,960						
{ P. 1,708	1,480	3,188	5,650	3,188	1,195	1,292	2,653	535
{ R. 1,801	661	2,462						
{ P. 10,032	8,461	18,493	7,873	18,493	8,663	6,545	16,019	2,437
{ R. 31,596	12,897	44,493						
{ P. 1,089	1,052	2,141	2,520	2,141	1,425	681	2,121	20
{ R. 291	88	379						
{ P. 1,507	1,289	2,796	3,432	2,796	1,701	806	2,554	242
{ R. 543	93	636						
{ P. 1,028	963	1,991	2,252	1,991	1,374	435	1,839	152
{ R. 231	30	261						
{ P. 1,501	1,332	2,833	9,083	2,834	1,806	830	2,681	146
{ R. 4,105	2,145	6,250						
{ P. 285	258	543	1,365	543	297	191	517	26
{ R. 564	258	822						
{ P. 1,432	1,184	2,616	3,316	2,616	1,510	857	2,438	178
{ R. 636	64	700						
{ P. 1,332	1,139	2,471	4,534	2,471	1,576	698	2,349	122
{ R. 1,231	311	1,542						
{ P. 187	152	339		339	216	95	317	22
{ R. 164	18	182						
{ P. 89	61	150	2,349	150	80	43	126	24
{ R. 427	143	570						
{ P. 675	563	1,238		1,238	651	232	919	319
{ R. 279	112	391						
{ P. 908	769	1,677	2,072	1,677	836	693	1,571	106
{ R. 351	44	395						
{ P. 888	766	1,654	2,435	1,654	910	431	1,377	277
{ R. 655	126	781						
{ P. 617	535	1,152	1,937	1,152	603	410	1,053	99
{ R. 618	167	785						
{ P. 11,538	10,063	21,601	3,209	21,602	12,985	6,402	19,862	1,733
{ R. 10,095	3,599	13,694						
{ P. 672	623	1,301	1,601	1,301	892	354	1,263	38
{ R. 196	104	300						
{ P. 247	224	471	534	471	327	128	460	11
{ R. 46	17	63						
{ P. 882	797	1,679	2,022	1,679	766	670	1,473	206
{ R. 297	46	343						
{ P. 1,195	1,111	2,306	3,139	2,306	1,079	1,005	2,227	79
{ R. 632	201	833						
{ P. 1,282	1,173	2,455	3,314	2,455	1,222	935	2,276	179
{ R. 605	254	859						
{ P. 1,237	1,069	2,306	4,461	2,306	1,009	1,080	2,170	136
{ R. 1,347	808	2,155						
{ P. 5,521	4,997	10,518	2,512	10,518	5,295	4,172	9,869	649
{ R. 3,123	1,430	4,553						
{ P. 74,945	63,592	1,38,537	3,057	1,38,570	67,886	54,092	1,27,931	10,374
{ R. 76,799	29,188	1,05,987						

STATEMENT

No.	Districts and Towns,					Re-vaccination.		
						Total.	Successful.	Unknown.
1	2					15	16	17
60	Larkana	...	...	...	T. C.	350	43	166
61	Do.	...	...	...	R. C.	8,934	751	5,575
62	Ratodero	...	...	...	"	9,535	1,427	4,554
63	Do.	...	...	...	T. C.	361	57	104
64	Kambar	...	...	...	"	931	47	450
65	Do.	...	...	...	R. C.	4,096	749	1,480
66	Miro Khan	...	...	...	"	3,695	550	1,377
67	Warah	...	...	...	"	5,169	863	1,652
68	Dokri	...	...	...	"	8,960	1,666	4,587
69	Shahdadkot	...	...	...	"	2,462	390	722
Total, Larkana district						44,493	6,543	20,267
70	Shikarpur	...	...	...	T. C.	379	97	139
71	Do.	...	...	...	R. C.	636	35	193
72	Sukkur	...	...	...	"	261	22	104
73	Do.	...	...	...	T. C.	6,250	841	3,349
74	Rohri	...	...	...	"	822	211	193
75	Do.	...	...	...	R. C.	700	9	585
76	Garhi Yasin	...	...	...	"	1,542	310	479
77	Do.	...	...	...	T. C.	182	29	62
78	Ghotki	...	...	...	"	570	21	423
79	Do.	...	...	...	R. C.	391	21	346
80	Mirpur Mathelo	...	...	...	"	395	69	120
81	Pano Akil	...	...	...	"	781	15	754
82	Ubauro	...	...	...	"	785	89	421
Total, Sukkur district						13,694	1,769	7,168
83	Jacobabad	...	...	...	R. C.	300	25	121
84	Do.	...	...	...	T. C.	63	4	13
85	Garhi Khairo	...	...	...	R. C.	343	39	187
86	Thul	...	...	...	"	833	50	98
87	Kandhkot	...	...	...	"	859	63	325
88	Kashmore	...	...	...	"	2,155	74	1,221
Total, Upper Sind Frontier district						4,553	255	1,965
Total, Sind						1,05,987	12,035	55,143

No. I.—*contd*

Percentage of successful cases in which the results were known,		Persons successfully vaccinated per 1,000 of popula- tion.	Total cost of Vaccination Department.	Number of all successful vaccinations and re-vaccinations performed by the vaccination staff only,	Average cost of each successful case performed by the vaccination staff.
Primary.	Re-vaccination.				
18	19	20	21	22	23
100'00	23'37	33'38	Rs. a. p. ...	...	Rs. a. p. ...
99'65	22'36	38'74	...	...	...
99'73	28'67	58'55	...	...	...
100'00	22'18				
99'76	9'77	42'52	...	...	...
99'87	28'63				
100'00	23'72	44'86	...	...	...
99'29	24'54	43'76	...	...	...
99'69	38'10	51'37	...	...	...
100'00	22'41	81'81	...	...	...
99'77	12'74	48'48	14,508—2—0	22,562	0—10—3
100'00	36'25	35'49	...	...	...
100'00	7'90	35'26	...	...	...
100'00	14'01	28'05	...	...	...
99'77	28'99	50'84	...	...	...
100'00	33'55	43'08	...	...	...
100'00	7'83	31'44	...	...	...
100'00	29'16	43'76	...	...	...
100'00	24'17				
100'00	14'28	23'21	...	...	...
100'00	46'67				
100'00	25'09	33'78	...	...	...
100'00	55'56	29'44	...	...	...
100'00	24'45	24'75	...	...	...
99'96	27'11	34'68	11,858—3—6	21,631	0—8—0
100'00	13'96	18'00	...	...	...
100'00	8'00	29'46	...	...	...
100'00	25'00	...	...	...	...
100'00	6'08	37'14	...	...	...
100'00	11'80	36'25	...	...	...
100'00	7'92	54'19	...	...	...
100'00	9'85	39'77	6,853—2—0	10,124	0—10—10
99'82	23'67	60'18	1,05,335—11—10	1,39,966	0—12—0

STATEMENT

No.	Districts and Towns.						Population according to census of 1931.	Average population per square mile.	Average number of Vaccinators employed throughout the year.
1	2						3	4	5
1	Karachi	district	...	...	...	...	3,15,413	...	8
2	Hyderabad	„	...	...	...	...	5,62,373	...	10
3	Nawabshah	„	...	...	...	...	4,96,612	...	9
4	Thar Parkar	„	...	...	...	...	4,64,199	...	12
5	Larkana	„	...	...	...	...	4,38,558	...	7
6	Dadu	„	...	...	...	...	3,36,693	...	7
7	Sukkur	„	...	...	...	...	4,75,097	...	8
8	Upper Sind Frontier	...	...	...	...	...	2,38,796	...	5
Total Sind, excluding Towns							33,27,741	...	66
KARACHI COLLECTORATE.									
	Karachi	...	...	...	...	T. C.	2,54,031	...	6
	Do.	...	...	...	...	C. C.	...	...	1
	Tatta	...	...	...	...	T. C.	9,635	...	...
	Ketibandar	...	...	...	...	„	...	...	...
Total							2,63,666	...	7
HYDERABAD COLLECTORATE.									
	Hyderabad	...	...	...	...	T. C.	96,021	...	1
	Do.	...	...	...	...	C. C.	4,530	...	1
	Hala	...	...	...	...	T. C.	...	...	...
	Mataruin	...	...	...	...	„	...	...	...
	Nasarpur	...	...	...	...	„	...	...	...
	Tando Allahyar	...	...	...	...	„	...	...	...
	Tando Muhammadkhan	...	...	...	...	„	...	...	...
Total							1,00,551	...	2
NAWABSHAH COLLECTORATE.									
	Tando Adam	...	...	...	...	T. C.	...	...	...
	Shahdadpur	...	...	...	...	„	...	...	...
Total							...	...	...
THAR PARKAR COLLECTORATE.									
	Umarkot	...	...	...	...	T. C.	3,841	...	...
	Mirpurkhas	...	...	...	...	„	...	...	...
Total							3,841	...	...

No. I.—*contd.*

Total number of persons vaccinated.			Average number of persons vaccinated by each Vaccinator.	Primary Vaccination.				
				Total.	Successful.			Unknown.
					Under one year.	One and under six years.	Total of all ages.	
Male.	Female.	Total.						
6	7	8	9	10	11	12	13	14
{ P. 4,475	3,540	8,015	} 1,205	8,015	2,349	4,684	7,675	340
{ R. 1,353	272	1,625						
{ P. 8,138	6,249	14,387	} 1,654	14,387	5,572	7,403	13,448	939
{ R. 1,827	327	2,154						
{ P. 8,685	7,502	16,187	} 2,229	16,187	8,153	6,124	14,724	1,456
{ R. 3,213	658	3,871						
{ P. 8,845	7,043	15,888	} 1,904	15,888	6,675	7,718	15,067	810
{ R. 5,393	1,571	6,964						
{ P. 9,166	7,717	16,883	} 8,533	16,883	7,851	5,910	14,564	2,283
{ R. 30,307	1,254	42,851						
{ P. 5,693	4,960	10,653	} 2,172	10,654	5,314	4,212	10,084	562
{ R. 3,430	1,120	4,550						
{ P. 8,387	7,203	15,595	} 2,636	15,595	9,161	4,562	14,100	1,495
{ R. 4,544	947	5,491						
{ P. 5,274	4,773	10,047	} 2,907	10,047	4,968	4,044	9,409	638
{ R. 3,077	1,413	4,490						
{ P. 58,663	48,992	1,07,655	} 2,722	1,07,656	50,043	44,657	99,071	8,523
{ R. 53,144	18,852	71,996						
{ P. 8,459	7,651	16,110	} 5,845	16,137	10,069	4,001	15,381	612
{ R. 13,045	5,913	18,958						
{ P. 73	47	120	} 402	120	49	35	84	4
{ R. 219	64	282						
{ P. 110	102	212	} ...	212	70	97	182	30
{ R. 22	16	38						
{ P. 41	31	72	} ...	72	13	47	65	3
{ R. 5	...	5						
{ P. 8,683	7,831	16,514	} 5,114	16,541	10,201	4,180	15,712	649
{ R. 13,290	5,993	19,283						
{ P. 1,969	1,739	3,708	} 6,647	3,711	1,600	1,391	3,003	695
{ R. 1,839	1,100	2,939						
{ P. 45	33	78	} 97	78	35	38	77	1
{ R. 18	1	19						
{ P. 95	97	192	} ...	192	115	72	188	4
{ R. 3	...	3						
{ P. 82	71	153	} ...	153	45	101	150	3
{ R. 52	3	55						
{ P. 69	50	119	} ...	119	21	83	117	2
{ R. 148	5	153						
{ P. 58	46	104	} ...	104	25	67	98	6
{ R. 71	...	71						
{ P. 84	72	156	} ...	156	49	81	142	14
{ R. 78	9	87						
{ P. 2,402	2,108	4,510	} 3,919	4,513	1,890	1,833	3,775	725
{ R. 2,209	1,118	3,327						
{ P. 252	230	482	} ...	482	236	211	466	16
{ R. 57	14	71						
{ P. 134	96	230	} ...	230	89	113	211	19
{ R. 2	1	3						
{ P. 386	326	712	} ...	712	325	324	677	35
{ R. 59	15	74						
{ P. 45	46	91	} ...	92	47	31	78	12
{ R. 69	...	69						
{ P. 174	185	259	} ...	359	161	154	350	9
{ R. 509	93	602						
{ P. 219	231	450	} ...	451	208	185	428	21
{ R. 578	93	671						

STATEMENT

No.	Districts and Towns.						Re-vaccination.		
							Total.	Successful.	Unknown.
1	2						15	16	17
1	Karachi	district	...	...	...	...	1,625	223	488
2	Hyderabad	„	...	...	...	...	2,154	187	472
3	Nawabshah	„	...	...	...	...	3,871	711	1,011
4	Thar Parkar	„	...	...	...	...	6,964	721	1,928
5	Larkana	„	...	...	...	...	42,851	6,396	19,947
6	Dadu	„	...	...	...	...	4,550	960	1,241
7	Sukkur	„	...	...	...	...	5,491	570	3,002
8	Upper Sind Frontier		...	...	...	...	4,490	251	1,952
Total, Sind, excluding Towns ...							71,996	10,019	30,042
KARACHI COLLECTORATE.									
	Karachi	...	...	...	T. C.	...	18,958	...	18,958
	Do.	...	...	...	C. C.	...	282	74	2
	Tatta	...	...	...	T. C.	...	38	3	27
	Ketibandar	...	...	...	„	...	5	...	...
Total ...							19,283	77	18,987
HYDERABAD COLLECTORATE.									
	Hyderabad	...	...	...	T. C.	...	2,939	214	664
	Do.	...	...	...	C. C.	...	19	17	2
	Hala	...	...	...	T. C.	...	3	...	...
	Mataruin	...	...	...	„	...	55	...	...
	Nasarpur	...	...	...	„	...	153	5	45
	Tando Allahyar	...	...	...	„	...	71	...	13
	Tando Muhammadkhan	...	...	...	„	...	87	4	55
Total ...							3,327	240	779
NAWABSHAH COLLECTORATE.									
	Tando Allahyar	...	...	...	T. C.	...	71	22	21
	Shahdar	...	...	...	„	...	3	...	...
Total ...							74	22	21
THAR PARKAR COLLECTORATE.									
	Umarkot	...	...	...	T. C.	...	69	1	...
	Mirpurkhas	...	...	...	„	...	602	221	62
Total ...							671	222	62

No. I.—*contd.*

Percentage of successful cases in which the results were known		Persons successfully vaccinated per 1,000 of population.	Total cost of Vaccination Department.	Number of all successful vaccinations and re-vaccinations performed by the vaccination staff only.	Average cost of each successful case performed by the vaccination staff.
Primary.	Re-vaccination.				
18	19	20	21	22	23
			Rs. a. p.		Rs. a. p.
100	19'61	25'04	8,221—10—2	7,898	1—0—8
100	11'12	24'25	11,219—8—7	13,635	0—13—2
99'95	24'86	31'08	9,823—6—9	15,435	0—10—2
99'93	14'32	34'01	12,492—13—10	13,788	0—12—8
99'75	27'93	47'79	13,945—10—0	20,960	0—10—8
99'93	29'01	32'80	7,931—11—0	11,044	0—11—6
100	22'90	30'88	9,520—1—6	14,670	0—10—5
100	9'89	40'45	6,328—5—0	9,660	0—10—6
99'94	23'88	32'78	79,483—2—10	1,09,090	0—11—8
99'25	...	6'55	9,785—2—0	15,381	0—10—2
72'41	26'73	...	...	158	...
100	27'27	19'20	...	185	...
94'20	...	...	...	65	...
99'04	26'01	5'99	9,785—2—0	15,798	...
99'67	9'41	33'50	2,296—15—0	3,217	0—11—5
100	100	20'75	...	94	...
100	...	...	...	188	...
100	...	...	...	150	...
100	4'68	...	...	122	...
100	...	...	...	98	...
100	12'50	...	...	146	...
99'74	9'42	3'99	2,296—15—0	4,015	...
100	44'00	...	...	488	...
100	...	...	...	211	...
100	41'51	...	...	699	...
98'70	1'45	20'57	...	79	...
100	40'93	...	...	571	...
99'77	36'45	169'23	...	650	...

STATEMENT

No.	Districts and Towns.						Population of according to census of 1931.	Average population per square mile.	Average number of Vaccinators employed throughout the year.
1	2						3	4	5
	LARKANA COLLECTORATE.								
	Larkana	...	...	...	...	T. C.	24,841	...	1
	Kambar	...	...	...	...	"	...	...	...
	Ratodero	...	...	...	...	"	...	...	...
	Total						26,841	...	1
	DADU COLLECTORATE.								
	Dadu	...	...	...	...	T. C.	...	...	...
	Sehwan	...	...	...	...	"	...	...	...
	Kotri	...	...	...	...	"	...	...	...
	Manjhand	...	...	...	...	"	...	...	...
	Total						...	...	...
	SUKKUR COLLECTORATE.								
	Sukkur	...	...	...	...	T. C.	69,277	...	1
	Shikarpur	...	...	...	...	"	62,505	...	1
	Rohri	...	...	...	...	"	16,900	...	1
	Garhi Yas in	...	...	...	...	"	...	...	...
	Ghotki	...	...	...	...	"	...	...	...
	Total						1,48,682	...	3
	UPPER SIND FRONTIER COLLECTORATE..								
	Jacobabad	...	...	...	...	T. C.	15,748	...	1
	Total						15,748	...	1
	Total, Towns						5,59,329	...	14
	Inspector's cost	...	...	...	...	...	...	...	...
	Total, Sind						38,87,070	...	80

No. I.—*contd.*

Total number of persons vaccinated.			Average number of persons vaccinated by each Vaccinator.	Primary Vaccination.				
				Total.	Successful.			Unknown.
					Under one year.	One and under six years.	Total of all ages.	
Male.	Female.	Total.						
6	7	8	9	10	11	12	13	14
{ P. 462	408	870	} 1,220	870	484	369	853	17
{ R. 275	75	350						
{ P. 293	244	537	} ...	537	193	229	428	108
{ R. 808	123	931						
{ P. 111	92	203	} ...	203	135	37	174	29
{ R. 206	155	361						
{ P. 866	744	1,610	} 3,252	1,610	812	635	1,455	154
{ R. 1,289	353	1,642						
{ P. 91	67	158	} ...	158	72	73	152	6
{ R. 403	54	457						
{ P. 64	66	130	} ...	130	53	65	123	7
{ R. 52	9	61						
{ P. 118	101	219	} ...	219	98	105	214	5
{ R. 149	19	168						
{ P. 55	47	102	} ...	102	33	67	102	...
{ R. 29	13	42						
{ P. 328	281	609	} ...	609	256	310	591	18
{ R. 633	95	728						
{ P. 1,501	1,332	2,833	} 9,083	2,834	1,806	830	2,681	146
{ R. 4,105	2,145	6,250						
{ P. 1,089	1,052	2,141	} 2,520	2,141	1,425	681	2,121	20
{ R. 291	88	379						
{ P. 285	258	543	} 1,365	543	297	191	517	26
{ R. 564	258	822						
{ P. 187	152	339	} ...	339	216	95	317	22
{ R. 164	18	182						
{ P. 89	61	150	} ...	150	80	43	126	24
{ R. 427	143	570						
{ P. 3,151	2,855	6,006	} 4,736	6,007	3,824	1,840	5,762	238
{ R. 5,551	2,652	8,203						
{ P. 247	224	471	{ 534	471	327	128	460	11
{ R. 46	17	63						
{ P. 247	224	471	} 534	471	327	128	460	11
{ R. 46	17	63						
{ P. 16,282	14,600	30,882	} 4,634	30,914	17,843	9,435	28,860	1,851
{ R. 23,655	10,326	33,991						
...
{ P. 74,945	63,592	1,38,537	} 3,057	1,38,570	67,886	54,092	1,27,931	10,374
{ R. 76,799	29,188	1,05,987						

STATEMENT

No.	Districts and Towns.					Re-vaccination.		
						Total.	Successful.	Unknown.
1	2					15	16	17
	LARKANA COLLECTORATE.							
	Larkana	...	...	T. C.	...	350	43	166
	Kambar	...	...	"	...	931	47	450
	Ratodero	...	...	"	...	361	57	104
	Total					1,642	147	720
	DADU COLLECTORATE.							
	Dadu	...	...	T. C.	...	457	1	294
	Sehwan	...	...	"	...	61	13	25
	Kotri	...	...	"	...	168	66	32
	Manjhand	...	...	"	...	42	25	2
	Total					728	105	353
	SUKKUR COLLECTORATE.							
	Sukkur	...	...	T. C.	...	6,250	841	3,349
	Shikarpur	...	...	"	...	379	97	139
	Rohri	...	...	"	...	822	211	193
	Garhi Yasin	...	...	"	...	182	29	62
	Ghotki	...	...	"	...	570	21	423
	Total					8,203	1,199	4,166
	UPPER SIND FRONTIER COLLECTORATE.							
	Jacobabad	...	...	T. C.	...	63	4	13
	Total					63	4	13
	Total, Towns					33,991	2,016	25,101
	Inspector's cost	...	...	...	...	...	...	...
	Total, Sind					1,05,987	12,035	55,143

No. I—contd.

Percentage of successful cases in which the results were known.		Persons successfully vaccinated per 1,000 of popula- tion.	Total cost of Vaccination Department.	Number of all successfully vaccinations and Re-vaccinations performed by the vaccination staff only.	Average cost of each successful case performed by the vaccination staff.
Primary.	Re-vaccination.				
18	19	20	21	22	23
			Rs. a p.		Rs. a. p.
100	23'37	33'38	562— 8— 0	896	0—10— 1
99'77	9'77	...	...	475	...
100	22'18	...	...	231	...
99'93	15'94	5'97	562— 8— 0	1,602	...
100	61	...	...	153	...
100	36'11	...	...	136	...
100	48'53	...	...	280	...
100	62'50	...	...	127	...
100	28'00	...	...	696	...
99'77	28'99	50'84	1,026—2—0	3,522	0— 4— 8
100	36'25	35'49	856—0—0	2,218	0— 6— 2
100	33'55	43'08	456—0—0	728	0—10— 0
100	24'17	...	...	345	...
100	14'29	...	...	147	...
99'90	29'70	46'82	2,338—2—0	6,961	...
100	8'00	29'46	524—13—0	464	1—2—1
100	8'00	29'46	524—13—0	464	1—2—1
99'41	22'68	55'20	15,507— 8—0	30,876	0—8—0
...	...	...	10,345—1—0	...	...
99'82	23'67	60'18	1,05,335—11—10	1,39,966	0—12—0

STATEMENT NO. I.—*contd.*

Summary.

			Total number of persons vaccinated.		Total number of operations performed.		Percentage of successful cases in which results were known.	
			Primary.	Re-vaccination.	Primary.	Re-vaccination.	Primary.	Re-vaccination.
By Special Staff	...	...	...	...	...	...	...	...
Districts excluding towns	...	...	1,07,655	71,996	1,07,656	71,996	99'94	23'88
Towns	...	...	30,684	33,690	30,716	33,690	99'52	22'40
Cantonments	...	...	198	301	198	301	83'42	30'64
Total	...	...	1,38,537	1,05,987	1,38,570	1,05,987	99'82	23'67

Average number of persons vaccinated by each vaccinator.		Number of children successfully vaccinated.		Ratio of successful vaccinations per 1,000 of population.	Total cost of department.	Number of all successful vaccinations performed.	Average cost of each successful case.
Vaccinators employed.	Persons vaccinated by each vaccinator.	Under one year.	One and under six years.				
...	...	...	...	...	Rs. a. p.	...	Rs. a. p.
66	2,722	50,043	44,657	32'78	...	...	...
12	5,365	17,759	9,362	55'20	...	...	...
2	250	84	73	55'63	...	...	...
80	3,057	67,886	54,092	60'18	1,05,335—11—10	1,39,966	0—12—0

STATEMENT NO. I.—*contd.*

Summary.

			Total number of persons vaccinated.		Total number of operations performed.		Percentage of successful cases in which results were known.	
			Primary.	Re-vaccination.	Primary.	Re-vaccination.	Primary.	Re-vaccination.
By Dispensary Staff	...	...	286	3,515	286	3,515	100·00	70·84
By private Medical Practitioners	...	...	18	22	18	22	100·00	14·29
By Railway Dispensaries	...	...	379	1,387	379	1,387	90·35	71·02
Total			683	4,924	683	4,924	95·33	70·79
GRAND TOTAL			139,22	110,911	139,253	110,911	99·80	27·38

Average number of persons vaccinated by each vaccinator.		Number of children successfully vaccinated.		Ratio of successful vaccinations per 1,000 of population.	Total cost of Department.	Number of all successful vaccinations performed.	Average cost of each successful case.
Primary.	Re-vaccination,	Primary.	Re-vaccination,				
...	...	23	18	...	Rs. a. p.	...	Rs. a. p.
...	...	14	4	...	...	...	...
...	.	120	100	...	...	...	...
...	...	157	122	...	...	...	...
80	3,057	68,043	54,214	...	...	...	...

STATEMENT

No	Districts and Towns.					Population according to census of 1931.	Average population per square mile.	Average number of Vaccinators employed throughout the year.
1	2					3	4	5
	BY SPECIAL STAFF.							
	Local Board	...	...	...	...	33,27,741	...	66
	Municipalities	...	...	...	...	5,54,799	...	12
	Cantonments	...	...	...	...	4,530	...	2
	Total, Sind ..					38,87,070	...	80
	By Prison Dispensary Staff	...	...	...	...	...	..	...
	By Railway Staff	...	...	...	...	..	...	...
	Private Medical Practitioners	...	...	...	...	...	...	...
	Total ...					...	...	...
	GRAND TOTAL ...					38,87,070	...	...

No. I.—*contd.*

Total number of persons vaccinated.			Average number of persons vaccinated by each Vaccinator.	Primary Vaccination.				
				Total.	Successful.			Unknown.
					Under one year.	One and under six years.	Total of all ages.	
Male.	Female.	Total.						
6	7	8	9	10	11	12	13	14
{ P. 58,663 { R. 53,144	48,992 18,852	1,07,655 71,996	} 2,722	—1,07,656	50,043	44,657	99,071	8,523
{ P. 16,164 { R. 23,419	14,520 10,271	30,684 33,690	} 5,365	30,716	17,759	9,362	28,699	1,846
{ P. 118 { R. 236	80 65	198 301	} 250	198	84	73	161	5
{ P. 74,945 { R. 76,799	63,592 29,188	—1,38,537 1,05,987	} 3,057	1,38,570	67,886	54,092	1,27,931	10,374
{ P. 252 { R. 3,477	34 38	286 3,515	} ...	286	23	18	258	28
{ P. 193 { R. 973	186 414	379 1,387	} ...	379	120	100	234	120
{ P. 8 { R. 13	10 9	18 22	} ...	18	14	4	18	...
{ P. 453 { R. 4,463	230 461	683 4,924	} ...	683	157	122	510	148
{ P. 75,398 { R. 81,262	—63,822 29,649	—13,9,220 1,10,911	3,057	1,39,253	68,043	54,214	1,28,441	10,522

STATEMENT

No.	Districts and Towns,					Re-vaccination.		
						Total.	Successful.	Unknown.
1	2					15	16	17
	BY SPECIAL STAFF.							
	Local Board	...	...	...	...	71,996	10,019	30,042
	Municipalities	...	...	...	...	33,690	1,925	25,099
	Cantonments	...	...	...	...	301	91	4
	Total, Sind					1,05,987	12,035	55,143
	By Prison Dispensary Staff	...	...	...	...	3,515	2,432	82
	By Railway Do.	...	...	...	...	1,387	647	476
	Private Medical Practitioners	...	...	...	...	22	1	15
	Total					4,924	3,080	573
	GRAND TOTAL					1,10,911	15,115	55,716

No. I—*contd.*

Percentage of successful cases in which the results were known.		Persons successfully vaccinated per 1,000 of popula- tion.	Total cost of Vaccination Department.	Number of all successfully vaccinations and Re-vaccinations performed by the vaccination staff only.	Average cost of each successfull case performed by the vaccination staff.
Primary.	Re-vaccination.				
18	19	20	21	22	23
			Rs. a. p.		Rs. a. p.
99'94	23'88	32'78	..	...	...
99'52	22'40	55'20	...	...	...
83'42	30'64	55'63	...	...	...
99'82	23'67	60'18	1,05,335—11—10	1,39,966	0—12—0
100'00	70'84	...	...	...	...
90'35	71'02	...	...	...	...
100'00	14'29	...	...	...	...
95'33	70'79	...	...	...	...
99'80	27'38	36'93	...	...	...

STATEMENT

Vaccination

Comparative Statement No. IV, showing the number of persons
vaccinated in each

Establishments.	PERSONS PRIMARILY								
	Total Number.	Number success- fully vacci- nated.	Total Number.	Number success- fully vacci- nated.	Total Number.	Number success- fully vacci- nated.	Total Number.	Number success- fully vacci- nated.	Total number.
	YEARS ENDED								
	1928-29.		1929-30.		1930-31.		1931-32.		1932-
Government ..	...	...	...	...	...	...	...	...	...
Municipality ...	14,725	12,851	18,046	15,421	16,384	14,174	18,431	15,463	21,469
Local Funds ...	84,092	79,061	69,725	65,253	82,644	78,096	87,024	80,316	94,804
Cantonment ...	79	79	216	212	84	83	118	116	91
Native States ...	5,243	5,000	4,016	3,837	6,065	4,928	5,649	5,502	6,352
Dispensaries ...	854	736	1,302	1,067	1,218	965	771	606	1,747
Army ...	...	...	...	...	...	...	...	...	...
Europeans ...	...	...	...	...	...	...	...	...	...
Natives ...	...	...	...	...	...	...	...	...	...
Total ...	1,04,993	97,727	93,305	85,790	10,53,95	98,246	1,11,993	1,02,003	1,24,463

No. IV. II

Return.

primarily vaccinated and the number of those persons who were successfully of the undermentioned official years.

VACCINATED.

Number success- fully vacci- nated.	Total Number.	Number success- fully vacci- nated.	Total Number.	Number success- fully vacci- nated.	Total Number.	Number success- fully vacci- nated.	Total Number.	Number success- fully vacci- nated.	Total Number.	Number success- fully vacci- nated.
ON 31ST MARCH.										
33.	1933-34.		1934-35.		1935-36.		1936-37.		1937-38.	
...
17,558	19,004	15,180	21,334	17,791	22,395	18,926	22,986	20,775	30,684	28,699
89,650	88,707	83,569	90,698	84,656	96,412	89,768	1,00,045	93,120	1,07,655	99,071
91	62	62	139	139	60	60	131	121	198	161
6,215	6,579	6,459	6,406	6,257	...	...	...	...	...	...
1,398	841	620	334	276	521	455	499	461	683	510
...
...
...
1,14,912	1,15,193	1,05,890	1,18,911	1,09,119	1,19,388	1,09,209	1,23,661	1,14,477	1,39,220	1,28,441

